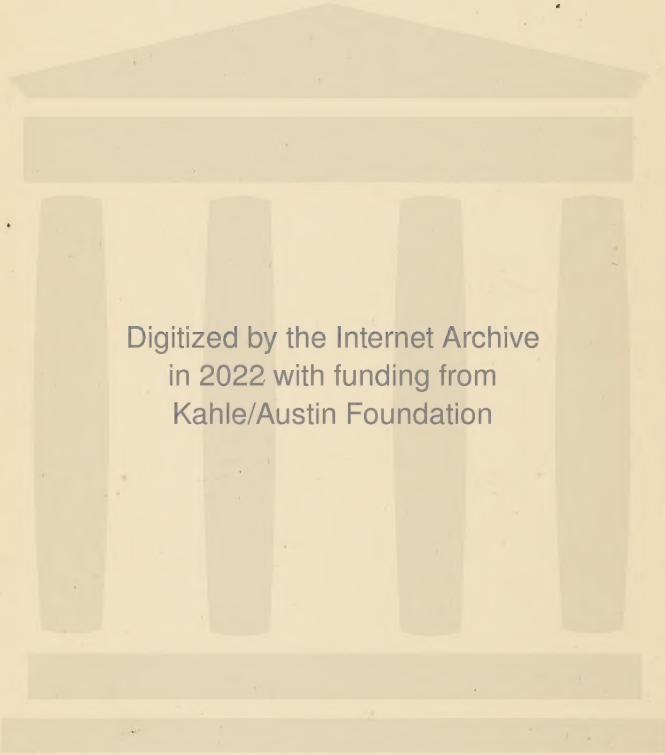


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AN INTRODUCTION TO SOCIAL ANTHROPOLOGY

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PREFACE

The recent rapid development of the social sciences has been accompanied by an interest in the methods and approaches of the anthropologist, and it was largely in response to this interest that the accompanying treatise was projected. Accordingly, it was conceived as an introduction to the field of anthropological study which would be of service to the student of the social sciences desirous of securing something in the way of anthropological perspective. Naturally, in such a treatise the emphasis is placed upon the social aspects of primitive life rather than upon its biological, linguistic, and economic phases. On the other hand, no one can achieve orientation in anthropology without giving some attention to all the phases of this many-sided subject; so, in these pages due consideration has been given to what may be styled the non-social phases of the subject. In this way it is hoped to present at least a general outline of anthropology as a whole, together with a more specific scheme for the social sciences of primitive peoples. We have also borne in mind that the student seeking such a general perspective in anthropology usually finds himself facing a dilemma; the data of anthropology are embodied in such a mass of descriptive detail that their assimilation in a short time is impossible, while, on the other hand, if the student turns directly to the generalized statements embodying the results and viewpoints in anthropological research, he fails to grasp their significance because unfamiliar with the descriptive data upon which these formulations are based. In the teaching of anthropology attempts to meet this situation are made by subjecting the undergraduate to an intensive course in primitive life, to be followed later, preferably in the graduate school, by an interpretative study of the phenomena previously described. Even so, there is a fundamental difficulty in that the student does not come into direct contact with the phenomena to be studied until he has spent several years in reading and then not unless opportunity is offered him to engage in field research. It appears then that the student of the social sciences desiring an acquaintance with anthropology must not only forego field study, but must also compromise by acquiring a

minimum of descriptive data and as comprehensive an interpretative view as time permits. So the accompanying volume is offered as a guide to the acquisition of such a perspective in anthropology with the hope that the confusion inherent in the situation may be lessened by presenting the research leads of anthropology in their historical sequences. It is assumed that the social science student is chiefly interested in knowing how anthropology makes the empirical approach, and the degree to which it achieves an objective point of view; further, that the direct approach to this can be made in outlining the fundamental problems, the formulation and pursuit of which have made anthropology what it is. The order of treatment is, therefore, largely historical. Yet, the subject matter is not presented as a history of anthropology, but as a review of achievement in anthropological research.

The value of such a review by the social student lies in its promise of an orientation in human society as a whole. Further, since the chief concern of the social scientist seems to be an understanding of contemporary life, he may anticipate that the comparison of data on primitive society with those pertaining to civilized communities will be of corrective value, if not directly contributory to such an understanding.

In connection with each chapter the student's background can be intensified by supplementary reading and inquiry, some of the most important and readily accessible books being listed. It is also desirable that, wherever practicable, the student try out the methods and conclusions reviewed in the text by experimenting with published data pertaining to primitive peoples and the facts of contemporary life as well; to facilitate such inquiry, specific suggestions have been made in the text. Another important requisite is familiarity with the gross geography of the world and the distributions of peoples, since the social anthropologist must be geographically as well as historically minded.

The author is indebted to his associates in the Institute of Human Relations, Yale University, for helpful suggestions and criticisms, and finally to Miss Bella Weitzner for the revision of the text and the bibliographical references.

CLARK WISSLER.

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AN INTRODUCTION TO
SOCIAL ANTHROPOLOGY

CHAPTER I

SCOPE OF ANTHROPOLOGY

Anthropology is often defined in general terms as the science of man. Like most other divisions of modern research it is a trait of European civilization. Its point of view is that of the European observing the rest of mankind. It began with the study of primitive peoples, but in the course of its development came to a realization that even the civilized peoples of Europe and Asia were integral parts of the whole. The history of anthropology shows how completely its development is integrated with the growth of European civilization. Before 1492 the educated European had a narrow outlook upon human life, knowing definitely only the adjacent parts of Africa and Asia; but during the next century or two, explorations brought to light strange peoples in the Americas, in the islands of the Pacific, and elsewhere, adding hordes of savages to the known human family. It is usual to say that the discovery of new lands made Europe great and powerful, but this is only part of the truth, for, had all these new lands been uninhabited, their influence would have been remote. Years would have been required to form settlements and to devise profitable methods of utilizing the natural resources of these virgin territories. On the contrary, these newly discovered lands were inhabited by peoples who, though savage, had begun to develop these resources, and it was trade with their inhabitants, seizure of their possessions and their persons, that gave the immediate impetus to Europe and started her upon a career of world domination. The quest for new lands was a search for new peoples whose trade and labor enriched their conquerors, while their strange appearance, their primitive arts, and curious customs, stimulated thought.

From the first, knowledge of primitive peoples provoked thought because the religious and intellectual background of the time was that of a narrower world and a far less varied

humanity. These newly discovered race types and the great variety of customs they practised revealed a far less homogeneous humanity than the religion and philosophy of the time had assumed. There arose at once the necessity of harmonizing this new knowledge with the old interpretations of life, according to which all human beings were descended from a single human pair within a brief interval of time. Europeans asked themselves, How are these savage people related to us? How can we reconstruct the family tree? How can we harmonize these new facts with the basic beliefs of our time? On one point the best thought of the time was unanimous, all these newly discovered peoples were pagans and knew nothing of European civilization. For many centuries Europe had been under Christian rule, the guiding spirit of which was to reclaim the human race by teaching and by converting it to the accepted faith. To the Church, then, the discoveries of Columbus and his successors opened a vista for service equal to, if not greater, than that for trade and domination, and her devotees accepted this challenge joyfully. With the Church, the State, and trade equally interested in these new peoples, it is not strange that they became immediate subjects for study. So, it was out of this background that anthropology, as we know it, developed. The problems and the methods of anthropology have changed from decade to decade, but it still remains the attempt of the European mind to comprehend mankind.

The first great expansion of Europe was the conquest and colonization of the Americas, the chief nations engaged in which were England, France, and Spain. As we have indicated, explorers, traders, missionaries, and colonists were immediately in contact with the New World native, and so it followed that the Indian received more attention than other primitive peoples and continues to do so. Indeed anthropology, as developed in the New World, is so largely devoted to the study of the American Indian that it is frequently thought of in those terms. It seems also that the Indian made a stronger appeal to European peoples than did the natives of many other parts of the world. However, following the colonization of the Americas, settlements began to multiply in Australia, the Islands of the Pacific, and in Africa, bringing new

native contacts and thus stimulating the serious study of non-American native peoples, so that now anthropology considers the whole primitive world as a field of operation. The outlook is, however, the same, European scholars viewing not only primitive, but most non-Christian, peoples, as anthropological phenomena.

Returning to the period of exploration and colonization in the New World and considering the state of European society at that time, we find Christianity and the Church dominating factors in American Indian policy. The Church encouraged discovery and exploration not so much for material gain but as a duty to rescue these primitive peoples from heathenism. Many centuries earlier, zealous Christian fathers had converted the barbarous peoples of northern Europe and thus spread the elements of civilization that animated Europe in 1492. The Church was then an organization long experienced in Old World missionary work, when the discovery of America brought the realization that thousands of human beings were living there in total ignorance of European civilization. To the Church their pagan state was a standing challenge, which was not unheeded. From the first, the three leading nations in New World exploitation were Spain, England, and France, and recalling the history of the period, we note that for her field of operation Spain took South America, the West Indies, Central America, Mexico, and southwestern United States; England began to colonize the eastern coast of the United States; France established herself on the St. Lawrence and the Great Lakes. The Spaniards seized the barbarian federations in Mexico and in the Andes of South America, and ruled them, the Church taking a leading part in organizing parishes and establishing schools. In Europe, as everyone knows, learning was still in the keeping of the Church and, consequently, the best-trained minds were among its devotees. Many able men left Spain to take part in the organization of schools and parishes and the building of churches, and our knowledge of life in aboriginal Mexico and Peru is based chiefly on the writings of these early observers, because, first of all, it was necessary to study the natives, to learn their languages, their customs, etc. However, once schools and church organizations were

established, in South America and Mexico, the Spanish church fathers seem to have lost interest in the aboriginal state of the native and ceased contributing works that later proved to be of importance to anthropology.

Somewhat in contrast to the Spaniards, who had met semi-civilized agricultural peoples, the French found themselves in a forested country in which lived tribes of hunting Indians, who could offer only furs in trade, but who were ready to exchange these for firearms and other products of European civilization. There were no barbaric nations to conquer, as in Mexico and Peru, but there were great waterways to be explored and many new tribes of Indians to be visited in search of furs. The French missionaries, however, were even more active than the traders. These missionaries were chiefly members of the Order of Jesuits, one of the most scholarly orders of the time and one devoted to education rather than to church organization, and the history of the period tells how these courageous Jesuits were foremost in exploration, always seeking new peoples. They also studied the Indian tribes they labored among and so their writings are of great anthropological value. The fur trade also stimulated investigation. The large fur-trading companies, English, as well as French, employed highly educated men to traverse the country to observe the modes of life of the Indian tribes, which information was used to guide the traders in developing their business. A number of the men engaged in the fur trade wrote books, some of which are anthropological classics in preliminary field observation.

The English colonies of the Atlantic Coast were largely Protestant, but they also supported extensive missionary activities; schools were organized on the frontier for the education of Indian children, native languages were studied, and accounts dealing with modes of life among the native tribes were published. While the anthropological enthusiasm of the Spanish and French missionaries soon waned, the English colonists gave more and more attention to the Indian tribes in their midst. Historical records were compiled and surveys made, so that by 1800 there was available a considerable body of published data on the aboriginal inhabitants of the New World. Also, missionaries and explorers in the Islands of the Pacific and else-

where were adding to this store, giving the European scholar a broad outlook upon the human world.

As we have indicated, certain troublesome questions had provoked European thought from the first, nor had this challenge weakened with increase in information; rather had it been intensified. According to the philosophy of the time, all primitive peoples had to be considered descendants of Adam and so directly related to Europeans themselves. The problem, then, was to trace and define this relationship. One of the earliest suggestions was that all Indians were descended from the "Lost Tribes of Israel" and a number of well-organized arguments on this proposal were published, some of which still survive. We must however forego the review of such interesting details in the history of anthropology. But, in general, the nineteenth century opened with a trend to systematize and to interpret the available knowledge concerning the peoples of the non-European world. Other sciences were also developing, particularly botany and zoology which were likewise stimulated by the discovery of new lands teeming with strange plants and animals. These new materials enriched these sciences, which were later given a scientific basis in the classification systems of Linnæus, who lived from 1707 to 1778. As we shall note later, Linnæus himself proposed a racial classification of mankind. Also, a number of comprehensive works were written by English scholars systematizing the existing knowledge of man. Among the most outstanding is that of Prichard (1786-1848), whose research objective was to discover the relationship of all living peoples, or, in other words, their origins. His method was to compare all the data available—anatomical, linguistic, and social—just as anthropologists still do. Though during the colonial period English students of anthropology led, after the American Revolution scholars in the United States took a prominent part in this development and have been active from 1800 onward.

THE RESEARCH APPROACH

Anthropology approaches its objective through several kinds of data. First of all, it deals with groups of peoples, and, as

we shall soon learn, primitive groups do not form great nations, but usually comprise a large number of small tribes, politically independent of one another. The speech of these tribes may also differ and, as a rule, there are at least some dissimilarities in social life. Like any other study of living forms, anthropology progresses by describing and comparing groups, in this case tribal groups, and for the sake of a clearer understanding, classifies them by types. For this purpose several kinds of data are used. In the first place, to determine the tribal type, the bodies of the tribesmen are studied, by noting the color of the skin, eyes, and hair, the shape of the head, face, nose, lips, etc. Such data are included in the division of anthropology spoken of as physical anthropology, racial anatomy, or somatology. Physical anthropology assumes that the tribal type is composed of individuals inheriting a definite set of distinguishing bodily characters and one of its problems is to trace the origins of tribes and races, or establish their biological relationships.

Another method of classification for tribes is according to speech. As we have stated, almost every tribe has a language of its own, some so distinctive as to be incomprehensible by any other tribe, but as there are many degrees of difference in tribal speech it is necessary to study these languages, to reduce them to writing, and to work out their grammatical structures, before they can be satisfactorily compared. Then, just as one physical type grows out of another, so do languages evolve from other languages; hence, one problem is to discover which languages are related in origin, this also enabling one to classify the tribes themselves according to their speech.

Again, primitive tribes may be classified according to their mode of life. Every tribe has some governmental machinery, special methods of feeding, clothing, and housing, a religion, etc. These can be observed and recorded, and when a reasonably complete description has been made, these data constitute what is variously termed as social anthropology, ethnology, culture, etc. All human life is complex and even primitive tribes maintain so great a variety of customs and beliefs, that a long time is required to observe them and record accurate descriptions, but once the information is in hand, tribes can be compared and classified accordingly. Then many interesting prob-

lems arise when we consider the relations of primitive modes of life, to one another, and to modern life. The history of such institutions as marriage and the family can be approached by the study of data from primitive peoples. Among other interesting problems that may be taken up in the same way are, beliefs in spirits, the practice of magic, relationship systems, and property. Students of our own society are also interested in these problems, because primitive customs seem to be the background from which many elements of contemporary social life have been derived.

So far, we have considered the study of living peoples only, but anthropology is equally concerned with the past. Civilized nations have written histories, but the surviving primitive tribes have none; their past must be recorded by other methods, if at all. One interesting problem in anthropology is the origin of man. In the Old World the fossilized bones of human beings have been found, indicating that types of men quite different from those now living, once inhabited the earth. These extinct species are regarded as the ancestral forms from which the modern races of men evolved. But we are not limited to what we learn from these fossil bones, for many of these early men used tools, made fire, hunted large game animals, and buried their dead. So, digging around their campfires, one may learn much about their modes of life. It is also possible to arrange these campsites in order of their age and thus begin to trace the steps by which man has developed his present modes of life. Studies with such excavated materials are spoken of as archæology. Unless writing has been preserved, as in the ruined cities of the Old World, we can learn nothing about the languages of extinct tribes, so archæology contributes chiefly to physical anthropology and to social anthropology, in so far as the objects preserved enable us to reconstruct the modes of life of a given time. As we shall see later, archæology does make important contributions to social anthropology.

There are, then, at least four main subdivisions of anthropology—physical anthropology, linguistics, social anthropology, and archæology. Each is of sufficient breadth to call for specialization so that one may confine his studies to a few problems in but one of these divisions. Again, since man spread

over the greater part of the earth, the scope of inquiry is so extensive that regional specializations become necessary. We have just reviewed the historical conditions that led to specialization in the anthropology of the American Indian. The anthropologists of the United States, and many other European countries as well, devote themselves almost entirely to some one or two phases of the Indian problem. On the other hand, French and Scandinavian anthropologists have specialized upon prehistoric man in western Europe and have thus become the leading archæologists of the world. One of the fundamental aspects of human life is that it differs as we pass from one part of the world to another, or presents regional differences. These also encourage specialization and as few students have the time to read all the important books in anthropology, they also must select some region for intensive study. Anthropology is then a large subject, both extensive and intensive, since it attempts to follow the whole of mankind from the time of their first appearance upon the earth to the present day.

RESEARCH LEADS

Since anthropology faces so huge a task, one may suspect that only a small part of its field has been developed. Every science has progressed by the discovery of new problems, or rather by an insight into the application of empirical methods in new ways and to new materials. Any one making such a discovery is said to open a new lead and one's comprehension of the points of view and his evaluation of the achievements of any science, will not go far until he knows what these leads are. The first such lead in anthropology came in the study of languages, probably because of the attention given to them by missionary scholars. The discovery was, that the languages of the world could be grouped by similarities in words and grammatical structure, and it was assumed that the languages in each such group had a common origin. What this promised for anthropology, we shall see later.

Another lead may be called the application of the archæological method, by which the unwritten history of man may be recorded. This, like the linguistic lead, was objective; by not-

ing the stratigraphic position in the ground of stone implements, bones, etc., and their relation to other objects, these could be arranged in the order of their ages. In this way, by objective observation and sufficiently refined methods, the successive changes in man's life can be learned. The first advances came with the recognition of the stone, bronze, and iron ages in Denmark.

The beginnings of social anthropology lie in the United States, where Lewis H. Morgan discovered the diversity of systems in denoting family relationships and the place of these relationships in the organization of the community and the tribe. His methods were objective, like the preceding, and if he did not inaugurate anthropological field-work, he was one of the first to make a thorough study of the social life of a tribe. The work of Morgan was followed by that of Tylor in England who led the way in the objective study of beliefs concerning spirits and souls.

Physical anthropology, on the other hand, being a biological science, takes its leads from that field. These were the discoveries of Darwin, the biometric method, and Mendelian heredity. The second is the most used in physical anthropology, where measurements on the skeleton and upon the living are handled by biometric methods and in this way tribal types are distinguished.

Finally, in Germany there arose the science of geography and later the idea that the distribution of modes of life over the earth was the key to their origin. It was conceived that the local environment gave human life its character and, therefore, that the most fruitful procedure would be to follow geographical methods. This and the preceding leads have been intensively exploited and a review of the results achieved under each will give the reader a general perspective of anthropological research.

SOCIAL ANTHROPOLOGY

We shall take the term social anthropology as the guiding concept in this discussion because our concern will be with the social life of man, rather than with his anatomy, physiology,

and psychology. Sometimes we speak of this social life as civilization, but in social anthropology, the term culture is preferred; and culture, when used in this technical sense, includes all the group activities, or the conventionalized habits, of a tribe or a community. However, we must not confuse this use of the term with certain qualities of individual behavior, as when we say a man is highly cultured, or again, with group values, as when we say one is civilized and the other barbarous, chiefly because we have set out to learn what we can about modes of human life, not to evaluate them. In any event, it seems wiser to come into a full understanding of modes of human life before one attempts to value them.

What we need to bear in mind, then, is that when the term culture is used in social science, it does not imply values or ratings, as higher and lower, ignorant and enlightened, etc., but stands for that which is expressed in the term "habits and customs of a tribe." Just why one should prefer habits and customs to the single word, customs, is not clear. Apparently the writers who use this term fear that customs may not convey the whole meaning; as, for example, if one encounters a tribe in which a man must not speak to his wife's mother, this might be regarded as a unique custom; but if the tribesmen sometimes ate insects, that might be called a bad habit. While there may be a distinction here, the social anthropologist does not make it, for all such things are the content of culture, as he senses the phenomenon, and he assumes that wherever mankind live in tribes or communities, there the phenomenon of culture will be met. There will be a body of customs—ways of doing things—which when observed, will, in their totality, comprise the culture of the group. Some prefer to look upon all these ways of doing things as the techniques set up in the group, or the best methods of procedure in meeting recurring social situations, and it may prove helpful so to regard them. Thus, when confronted with an unruly child, one group may hold to the rule that the matter must be taken in hand by the father; another, that the maternal uncle shall do it; still another that the situation is to be handled by the head men of the group, or in modern terms, by the police. All such procedures may be looked upon as customs, or again as so many specific techniques for

dealing with the same situation. However, one should note this peculiarity in culture, these techniques tend to be mutually exclusive; for a given situation each tribe tolerates but one technique. In the case of the naughty child, the father, the uncle, and the head men do not function now here, now there, among the families in the tribe; it is the duty either of all fathers, or it is not. We sometimes fancy that standardization of life is modern, forgetting that all group life rests upon standardized procedure. Further, it is this uniformity, or standardization, that gives the tribe customs. The social anthropologist finds that tribes differ in their techniques for doing certain things and states that in so far their cultures are different. So we may accept the working hypothesis that culture is a phenomenon of the human group and that every standardized procedure in the tribe is an element of its culture.

CHAPTER II

THE COMMUNITY AS THE ANTHRO- POLOGICAL UNIT

Anthropology, like other subjects of inquiry, concentrates upon something objective. There is a type of phenomenon which it finds observable, the reality of which it takes for granted. Reduced to its simplest terms, the object it studies is the primitive group. Viewing the primitive world as a whole, we see man as a camp dweller. We think of our own society in somewhat different terms. To us, what we call the family, seems the elementary social unit, but among primitive peoples the important social unit is the camp, or community. Primitive peoples do not live like rural populations under the sway of our civilization, with a family here and another there, but in camps or villages, each composed of several families, in the meaning we usually give to that term. Such a primitive community may be composed of several married pairs and their dependents, and in that sense it is a camp of cooperating families. Not every family in the camp participates equally in the round of life; if it did, there might be nothing like community life, for it is scarcely conceivable that each family could alone carry on all the social activities we are to discuss in these pages, but such is possible in a cooperating group of families. It is this cooperating group, camp, or community, that is the objective in anthropological research.

Many primitive communities live by hunting and in such cases the camp will be partially surrounded by uninhabited territory sufficient to maintain an adequate game supply. If, on the other hand, the group supports itself, in part, by gardening, the cultivated plots will cluster around the camp in which the people live. Naturally, for convenience as well as for safety, they are as close as possible. The modern slogan "in union there is strength" is fundamental in primitive life. It is fur-

ther observable that two or more camps may occupy the same locality, though each regards itself as a unit, but in contrast to other inhabitants of the region forms a group of more or less federated camps, with a common language and customs. The term, tribe, is usually applied to such a group. We shall consider later the nature of this integration, as we are now concerned with the objective form of primitive life.

Anthropology being in part a social science, one of its chief concerns is with the activities of the community. A single person would not interest anthropologists, nor would a single married pair have much to offer, except as part of a community. Human beings differ most from animals in their behavior when together; yet, not all human behavior is of interest to anthropology, for psychology, physiology, and medicine take care of large sectors of such behavior, leaving the sector that constitutes community life to the social sciences, and particularly that of primitive peoples, to anthropology.

DEFINITION OF TERMS

Before taking up our subject in detail some attention to terminology is advisable. We have used the term, community, to signify a group of people camping together, or living in one locality, regarding themselves as a unit and operating as such. They may be self-contained and function without contact or cooperation with other communities. The term local group is sometimes applied to primitive communities.

Another term frequently encountered in anthropological literature is, tribe, which has, among others, a political significance; it may be a single community, but usually comprises a number of communities. The tribe operates first of all as a political unit, having recognized leaders, or chiefs, administering a more or less formalized governmental procedure. Almost without exception all members of a tribe speak the same language or dialect and follow a uniform mode of life. So when the term, tribe, is used in this book, the reference is to a group of communities operating as a political unit.

The mode of life followed by the community or the tribe is regarded as a culture. The tribal culture includes all stand-

ardized social procedures, such as those followed in marriage, property, recreation, industry, art, labor, beliefs, ceremonies, etc. To comprehend the culture of a tribe one must follow the whole yearly round of tribal life, to observe what the tribe members do, when, and how. In social anthropology the phases studied fall under the head of culture.

By physical type, anatomical type, biological type, is meant the composite appearance of the tribe members as to bodily and facial features. Color of skin and hair are characters to which mankind seems to give most attention, but in anthropology many other features are taken into account in describing the tribal type.

Finally, the term primitive, as generally used in anthropology, is a convenient descriptive term for non-European peoples, or better still, those cultures and peoples not directly influenced by the great civilizations of the Old World. Nor need it be taken that a primitive group is an example of what preceded these civilizations. The popular terms savage, barbarous, and uncivilized do have some value in this connection, but, in the last analysis, resolve themselves into distinctions between the historical civilizations of the Old World and peoples without histories, which distinction will, in the main, suffice for a definition of the term primitive, as used in anthropology.

Each of these terms will be taken up in detail in the successive chapters in this book, where their significance and range of application will become clear. Their insertion at this time is necessary because their use cannot be avoided even at the outset, and because they will be encountered in the literature cited.

EXPERIENCE WITH COMMUNITY LIFE

When one sets out to study anthropology, his first task is to make the acquaintance of community life. It is the ideal of modern education and generally conceded to be the best possible method of learning, to bring the student into close association with what he wishes to study. First-hand experience is of greater value than any amount of book learning; at least it gives experience with the things studied. Yet, the student of social anthropology cannot readily come into direct contact

with primitive life. He is a member of a highly organized and well integrated form of society, so complex and so near to him, that it is almost impossible to see social activities in their true perspective. And even if he should reside near a community of surviving primitive people, casual contact will not suffice. On the contrary, he must devote a reasonable time to associating with them and to being instructed in their way of living and their interpretation of the world. In other words, a field study must be made, and it is the opinion of anthropologists that there is no adequate substitute for such field experience, that, though lectures be faithfully attended and many books carefully read, the first few months in such a community will open up a new vista of human life. Never again will human life appear as it did before. Yet, most college students in anthropology must be content with book knowledge, or, at best, with what can be learned from pictures and the collections in museums. In this way a kind of substitute may be realized, which, though falling far short of concrete experience, will assist in an understanding of what a community is. It is true that the abstract analytic account one finds in anthropological literature gives a picture of a community, but this is apt to be more like the idea one has of an animal never seen in the flesh, but with the skeleton of which he is familiar. Once the living animal is observed in action, the matter becomes much more real and satisfying.

So the best thing to do is to imagine ourselves in a living primitive community. To assist in this, one may read a few good objective descriptions, not the technical writings of anthropologists such as will constantly be referred to in this book, but the more or less naïve impressions of travelers who came into close touch with native life. Unfortunately, most travelers do not catch the spirit of native life and so their accounts are of little value here. However, the following list offers a range of the most accessible books, from which the reader may select according to his tastes:

George Catlin, *Illustrations of the Manners, Customs, and Condition of the North American Indians* (1913).

W. Dobrizhoffer, *An Account of the Abipones* (1822).

D. Kidd, *The Essential Kaffir* (1904).

Carl Lumholtz, *Through Central Borneo* (1920).

Walter McClintock, *The Old North Trail* (1910).

Herman Melville, *Typee* (1846).

K. Rasmussen, *Across Arctic America* (1927).

B. Spencer and F. Gillen, *Across Australia* (1912).

V. Stefansson, *My Life with the Eskimo* (1924).

G. L. Wilson, *Waheenee, an Indian Girl's Story* (1921).

Assuming that the reader has read some of these or similar books and has in mind what may be expected when one visits a primitive community, some cautions are in order. A difficulty no one escapes, not even the most experienced anthropologist, is inherent in the situation, since we view the primitive world through European eyes. We can scarcely avoid interpreting what we see of primitive life in terms of our own experience. A similar difficulty is encountered in the study of animal behavior. Thus, when we observe a dog stop suddenly and then start off in another direction, we are tempted to say, "He got an idea." Even the most refined technique of animal psychology has scarcely eliminated the more subtle of these tendencies. Yet, in a primitive community, the observer can try to take the native point of view and try to learn "to think primitive." Actual contact with native life does this more effectively than what one may acquire from books. Yet, even so, the educational background of the anthropologist will blur his vision and warp his interpretations. He tries to minimize this tendency by recording as faithfully as he can the literal statements of the primitive peoples he visits, to list their procedures accurately, and to describe their conduct in typical social situations. In the study of our own society, such a procedure is beset with so many difficulties, that most social students reject the method. In the case of primitive communities, however, the differences from our own social life are so great and we are so little concerned with their reputations for good or evil, that it is easier to take a disinterested objective attitude than is the case when studying our own neighbors. Nevertheless, the student of anthropology should be constantly alert to the danger of reading his own experience into native life.

FIELD STUDY

Now that the reader has formed some idea of what primitive community life means, it may serve as an introduction to its systematic study to note how field-work is carried on. In the first place, the investigator goes out with a definite idea of what he is to seek. His ideal, as based upon type studies made by his predecessors, will be to cover the phases of community life anthropologists have so far considered worthy of investigation. What these are may be sensed from the table of contents of the more complete tribal studies so far published. The individuality of the investigator and the limitations of time and place, will make such published works differ somewhat from each other, but if the reader views them from the standpoint of the subject matter and its organization, he will observe a certain sameness throughout. In any case, it is important that the reader familiarize himself with several relatively complete field studies. Among the more accessible are:

The Omaha Tribe (Twenty-seventh Annual Report, Bureau of American Ethnology, Washington, 1910)—Alice C. Fletcher and Francis La Flesche.

Material Culture, Social Organization, Religion, and Myths of the Koryak (Memoirs, American Museum of Natural History, vol. 10, parts 1 and 2, 1905-1908)—Waldemar Jochelson.

The Crow Indians (In Anthropological Papers, American Museum of Natural History, vols. 9, 11, 16, 21, 25)—R. H. Lowie.

The Todas, London, 1906—W. H. R. Rivers.

The Native Tribes of Central Australia, London, 1899—Baldwin Spencer and F. J. Gillen.

The Arunta: A Study of a Stone Age People, London, 1927—Baldwin Spencer and F. J. Gillen.

The Thompson Indians of British Columbia (Memoirs, American Museum of Natural History, vol. 2, part 4, 1900)—James Teit.

If none of these monographic studies is accessible, the next best thing will be to read a few less comprehensive reports by field anthropologists, such as may be found in the publications of institutions engaged in anthropological research. In any case, it is not expected that any one of these larger works be

read in their entirety at this time, but that their tables of contents be carefully scanned and sample topics be selected for reading. At least, a study of the author's plan, as revealed in the table of contents will go far toward informing the prospective student in anthropology of what are its objectives.

A good example is found in Teit's study of *The Thompson Indians of British Columbia*. This memoir covers the following main topics.

1. Historical and geographical statement of the tribe, notes on language, etc.
2. Discussion of manufactures, processes, tools, and materials.
3. Houses and furnishings.
4. Clothing and adornment.
5. Food; kinds, preparation, how obtained, etc.
6. Travel, transportation, and trade.
7. War, weapons, methods, etc.
8. Games and pastimes.
9. Social organization, festivals, etc.
10. Customs at birth, during childhood, at puberty, marriage, and death.
11. Religious beliefs, teachings, ceremonies, etc.
12. Medical and magical practices.
13. Decorative art, music, and dancing.
14. A collection of legends, myths, and tales (published separately).

The preceding schedule is typical of what will be found in every well-rounded description of tribal community life. The order of the topics and the relative emphasis given them will vary from author to author, but each will endeavor to furnish full information under similar heads. Further, the reader may observe that such a schedule of topics might well serve as an outline for a description of our own form of life, suggesting that all human community activities, civilized and primitive, are generally similar.

FIELD TECHNIQUE

Having acquired knowledge of the scope and expected content of a community or tribal study, the investigator selects a

group for his visit. The world is now so thoroughly explored that in but a few small areas can one find primitive communities, not yet visited by a white man, or concerning which there is no published information. At the present writing there are said to be a few groups of Australian natives unvisited; also a few tribes in New Guinea. This about exhausts the list, though there may be an unvisited group here and there in jungle areas. On the other hand, several hundred of the primitive communities that may be listed and named have never been visited by an anthropologist. It is also true that such detailed investigation as anthropology requires can best be carried through among natives who have been in contact with European peoples for a short time, and with whom they are at peace. Hence, there is little in the way of adventure, such anthropological investigation being peaceful routine work, much like ordinary laboratory research. Before visiting the tribal community selected for study, the investigator reads what literature there is concerning it, including the casual observations of the explorer who first discovered them.¹

The reader may never engage in an investigation of this kind, but we believe he will be better able to comprehend the literature referred to in these pages, if we make a brief statement of the method pursued when seeking information in a primitive community. If we visit a tribe of North American Indians, we will find many evidences of adjustment to our own culture. The regular costume of the men will be like our own and purchased of a trader. The women, also, will use modern textile materials, though often their dresses will be cut and sewed by themselves, thus giving them a style somewhat at variance with our own, nevertheless the costume will be European in all essential features. The Indians are also likely to live in houses and to use our factory-made utensils. They also may have abandoned many social and ceremonial procedures. The investigator thus has a two-fold task; he notes, by daily observation, what customs and practices seem to be original, as distinguished from those borrowed in whole or in part from

¹ If instruction in the routine of field-work is not available, the reader may profit by the handbook issued by The Royal Anthropological Institute: Barbara Freire-Marreco and John Linton Myres, *Notes and Queries on Anthropology* (Fourth Edition, London, 1912).

our own civilization. So far, he need but note what he sees. However, to live in a community one must be a welcome guest, or at least the guest of a family. Most of the younger Indians can speak English, some perfectly, but many of the old people cannot. Therefore, to interview the important personages in the community, an interpreter must be employed. Further, even what the investigator sees Indians do, calls for explanation, which is often to be obtained only from the older people. Again, since the real objective is to reconstruct the original life of the community before white contact, much of which can only be gleaned from the memories of the aged, a large part of the work will be in the nature of interviews through an interpreter. Naturally, the investigator attempts to acquire some of the language, but it would take a long time to learn it well enough to understand fully what is discussed. So an interpreter will always be used, more or less, increasing the chance for error and misunderstanding. However, it is usual to minimize such errors by securing independent accounts of the same subject with different interpreters.

Rarely has primitive man systematized knowledge of his own customs. He cannot, therefore, instruct fully as to the systems according to which his tribal institutions operate. The investigator must arrive at that through the detailed concrete statements of his native informants and with these statements in hand, himself determine what the systems are, if such there be. In interviewing natives, most investigators advise against direct questions, or such as can be answered by "yes" or "no." In the first place, the native interviewed may not understand clearly, and in the second place, he may answer as he thinks will best please the questioner. Some investigators use what is called the "narrative method." For example, a woman may be induced to give a full account of her own marriage, the circumstances that led up to it, etc. With similar accounts in hand from a few others, men and women, the investigator will be in a position to engage in general conversation on the subject, to clear up obscure points. Most other topics in the schedule can be approached in this way.

It is inevitable, however, that most of the information comes

from a few persons, who are found to be the best informed and the most capable of imparting what they know, and who take sufficient personal interest in the investigator to follow his lead. It is the experience of all that deep attachments are formed in this way, and these personal experiences are treasured by the investigators. Such experiences enable one to sense the similarity of human behavior throughout the species, no matter to what form of society the individual belongs.

As to language, the interpreter may be checked by taking down names and important terms phonetically. Also, if the ear of the investigator is keen enough, he may record texts in the original and afterwards work out the translation with an interpreter. This will make the work very slow, but, on the other hand, something may be gained in accuracy. Mention may be made of a few other devices. English anthropologists recommend the genealogical method. Before the end of this volume is reached, we shall see that the social organization of the primitive community is objectified in the relations of individuals in the community. Their social intercourse, political procedure, marriage relations, etc., are all expressed in the meshes of this genealogical system. So it is recommended that a census be taken; as a rule, the community is not large, making such an undertaking feasible. After recording the names, the sex, and the probable age of each person, the observer sets down their marriage relations and assumed parentage. This may be followed by all the important relationships of the adults to each other and their functions in community life. The former can be done anywhere, the latter will depend somewhat upon how well the community has preserved its old life. In any case, such an intimate knowledge of the community personnel will serve as the basis of all inquiries, enabling the field student to select the best qualified informants, and to secure sample biographies of typical individuals.

Natives, like ourselves, show reluctance to talk to strangers about sacred and intimate things, but, on the other hand, usually hesitate little in speaking of practical everyday affairs. So it is best to begin with such topics as food, clothing, housing, amusements, etc., gradually passing on to more serious

ones. Finally, there may be secret cults to which but a few members of the community are admitted; full information about these may never be obtained.

Now, assuming that the investigator has spent sufficient time with a community to have completed his schedule, his information will consist of numerous notes and narratives, census data, etc. With these before him, he proceeds to synthesize the data and arrange his formulated statement under headings similar to the suggested outline. If the natives studied still manufacture utensils and regalia, or possess examples of these, drawings and descriptions may be added to his memoir. Finally, the available data for neighboring tribes are examined, and a comparative statement made, showing in what relation the community studied stands to its neighbors in respect to the customs observed. The investigation will then have been brought to completion. The reason why there are so few complete published studies is that more than one visit is necessary to cover the subject and a thorough job calls for a long period of residence. On the other hand, there are incomplete studies for many tribes, often by a number of different investigators and published at different times and places. Of such publications, a long list can be compiled. Finally, this is not a complete statement of field method in the study of a community, but a rough sketch of the same, intended to give the reader an introduction to the literature of anthropological research and to orient him for what is to follow.

THE COMMUNITY A SOCIAL PHENOMENON

It is not the bare fact of living in proximity to one another that constitutes a community, as we shall use the term in this book. Primitive man not only uses speech but has thoughts to communicate and has so far reflected upon his community life as to draw distinctions between the members of his community and outsiders. He knows to which community he belongs and usually knows every member of it; at least, he has little difficulty in distinguishing at sight fellow community members from outsiders. So it is not necessary for the anthropologist to begin a field study by sorting individuals in order

to discern a community; he need but discover a camp, make some inquiries, or observe what individuals recognize each other as members of the same society. Thus the community is largely self-defined. His task is then to observe how this group lives, how it speaks, its physical characters, etc. If the emphasis in his study is to be placed upon culture in its social aspects, the approach will be as indicated in the preceding pages.

At the outset a hint was given that a process of social integration characterized human life. First, we see the community as a group of individuals, male and female, children and adults, young and old, following standardized procedures, not necessarily doing the same thing at the same time, but different things more or less according to rule, so synchronized as to feed, clothe, house, control and entertain the members of the group. Members of the group can act individually, in pairs, etc., but also as a unit. Those familiar with primitive life have noted how, as a team, the community will concentrate upon certain specific tasks. Thus certain Indian tribes in Washington State, made large use of wild berries. When these were ripe the whole community moved to the localities rich in such wild fruits, when all available hands joined in gathering the harvest. In the same area a run of salmon also called for united effort, to catch the fish, clean them and cure them by drying and smoking. In much the same way communities in all parts of the primitive world respond to analogous situations. It is true that sex and age distinctions may operate to prevent equal participation in these activities, but custom does integrate them, otherwise the result would be inharmonious with community welfare. Again the community may operate as a whole to perform a ceremony to cure a sick person or to engage in recreation, feasting, or playing games. This integration of individuals makes the community possible in a social sense and the methods and beliefs involved in such integration make up the content of social anthropology.

However, the process does not stop here, since we observe that communities may be integrated so that they frequently operate as tribal units. This form of integration, also, entails formal procedures and institutions of interest to anthropologists, not only forms of tribal government but marriage re-

strictions, ceremonial obligations, and property rights, as well. Moreover, it not infrequently happens that tribes federate politically, which in turn is another form of integration. In all such cases, however, the constituent groups exercise many of their original functions; thus, though in a federation, the tribe will still act independently in many situations, and in turn, the communities making up the tribe will function separately. It is in this sense that the community is the elemental culture group.

Finally, responses on the part of the community are highly spontaneous, but in such responses the members of the community sort themselves automatically to the exclusion of outsiders, or what amounts to the same thing, the outsiders fail to respond because they are not conscious of being members of the community. In certain California tribes, for example, if a chief or a shaman is taken ill, the whole personnel of the community rush to the house and remain there during the crisis, doing everything their culture provides for such situations. If strangers attempt to attend, they are excluded. Officials dealing with nomadic peoples have reported, how without warning and apparently without premeditation, a primitive community will strike camp and march off. Spencer and Gillen describe how when a cry arose that a man was seriously ill, all the men round about rushed over and gathered closely around the sick man. It may be true that such acts are habitual, but what we note is that no chief need appear and order the community to act, the announcement of the situation is sufficient to bring the response on the part of every individual. These instances show how real the community is, as a functioning body, and how definite are the attachments of individuals to it. The fundamentals of social behavior are involved in such phenomena as we have just cited and since the community seems to be the ultimate group unit manifesting culture, it is what may be figuratively called the anthropological element.

ECONOMIC AND BIOLOGICAL ASPECTS

The community may be studied according to several points of view. We may consider that because it is composed of per-

sons who live, reproduce their kind, and die, the community rests upon a biological foundation. It is obvious that, if no individuals survive, the community will become extinct. It is, also, the natural living of the community members that produces social phenomena. So it follows that the biological basis to the community is important. Anthropology recognizes this fact in a special division of study frequently spoken of as physical anthropology. In somewhat broader terms the subject of physical anthropology may be regarded as the biology of the community, embracing groups of important problems, some of which will be discussed in the next chapter. It is possible to ignore most of these biological problems in a social study, but anthropologists have not found it wise to do so. So even in a treatise on social anthropology some consideration must be given the biological aspect of the community and the tribe. Under this head fall such inquiries as the size of the tribe, density of primitive populations, resemblance in facial features, race affinities, racial classifications, etc., which we shall review in the next chapter.

On the other hand, communities and tribes must support themselves by utilizing the food resources of the locality in which they make their home. Their clothing, housing, utensils, etc., are made of materials taken from their immediate surroundings. In the literature of anthropology, these traits are spoken of as material culture. It is obvious that feeding, housing, etc., are of prime importance and so are basic to social life. Many scholars deny that such economic factors have any bearing upon social procedure, art, religion, etc., but it is clear that the social aspects of community and tribal life function only when the economic necessities are met. Anthropologists give detailed consideration to food production, housing, clothing, industrial art, etc., and, as we shall see, have formulated a number of important problems along these lines. So we shall give general consideration to the economic as well as to the biological basis to primitive community life.

CHAPTER III

THE BIOLOGICAL GROUP

The community comprises a group of living beings, male and female. We may quite consistently fix our attention upon them as biological phenomena. What the members of the group look like, their number, the permanence of their external characteristics, and their emotional and mental traits, may be and are taken as subjects of inquiry by anthropologists. As we have stated, the community has a biological basis and so may be made a subject of biological inquiry. Anthropology differs from physiology and psychology in that its concern is with the community group as a whole rather than with the individual; this will become clearer as we proceed with this review of anthropology and its problems. Another important characteristic of anthropology is that it views the group as a social unit, or rather considers that social functions determine the group. So though, as anthropologists, we may decide to fix our attention upon biological questions, we limit ourselves to the biological aspects of social groups. One of the first questions to arise in this connection will be the size of the primitive communities to be studied, the relative number of such communities in a given area, etc. Even though our sole interest be in the social life of the community, it is important to know how large a primitive community should be to carry on. Naturally, such a question can be approached most satisfactorily by observing communities in different parts of the world.

As we shall see later, a community maintains the many varied phases of its life by differentiation and cooperation among its members and it follows that the richness and variety of life in a community will depend, in part, upon the number of individuals involved. The environment, through the food supply and climatic conditions, is also believed to be a determinant of the number and the size of primitive communities. The notion that primitive populations are directly limited by the food sup-

ply is prevalent, and, further, that the type of community life in itself determines how many individuals can be fed in a given locality. We have then, in theory, a kind of vicious circle in which primitive man is caught and his numbers held approximately at one level. This circle is supposed to function thus: a hunting people depends upon the game within walking distance of its camp. They may increase this radius by occasionally shifting their base, provided they are not opposed by other camps. Yet, in any case, if they kill an excess of game, the number of animals will decrease, and the penalty will be direct or indirect starvation. So automatically, without thought on the part of the community, a balance would be preserved between the number of game animals and the human population. Yet we must not attach too much precision to the working of this adjustment, for even primitive man has intelligence and ingenuity by which he may manage when in straits, and by which he may improve his methods; nevertheless, it is clear that there is a margin beyond which a hunting people cannot go. On the other hand, should a hunting tribe develop agriculture and so supplement its game supply, then the population might conceivably increase until a balance was reached anew. This is what was meant by the statement that the type of life followed in a community determined its food supply and this in turn, the population. That this is generally true, is indicated by taking certain specific areas for comparison. For example, New England seems to have supported about 25,000 Indians in aboriginal days, but the population of English colonies displacing them soon rose to several times that number, whereas the population of present-day New England is counted in millions. Changes in mode of life and the mechanisms for feeding go hand in hand with such increase. It is because of these and other problems growing out of primitive populations, that the subject deserves our attention.

One difficulty in the study of primitive populations is the lack of good statistics. Further, the contact of Europeans with native populations so disturbs community life and population growth as to create a situation far from normal. What we seek then are data as to primitive populations at the time of their early contact with Europeans. But the early observers of

primitive communities almost never counted heads and though they have given estimates of the number, these are contradictory and so cannot be taken at face value. Nevertheless, these estimates can be used with such checks as can be devised for their control, as may be best illustrated in a serious attempt to determine the number of American Indians in the United States and Canada at the time of exploration by European peoples.¹ The sources of information were the estimates of explorers, traders, colonial officials, and other observers, which were rarely based on accurate counts. Most persons over-estimate the people in a town, or even in an audience, and when some of the first visitors to America speak of seeing thousands of Indians in one place, we may suspect exaggeration. The study referred to was made by Mooney, a competent investigator, who after thoroughly sifting and checking the data, summarizes, as follows:

	<i>Aboriginal</i>	<i>Present</i>
United States	849,000	266,000 ²
Canada	221,000	101,000
Alaska	73,000	28,000
Greenland	10,000	11,000
Total	<u>1,153,000</u>	<u>406,000</u>

In so far as the estimates in the first column may be trusted, the native population has declined more than one-half. Yet, the two columns differ greatly in accuracy, the second being based, for the most part, upon actual counts, whereas the first is an estimate and more likely excessive than otherwise. But, accepting these estimates as they stand, the contrast between the number of Indians to be found throughout the whole of the United States at the period of settlement and the present white population of the same territory, is impressive. Yet, the original Indians were living in hundreds of communities and under many independent tribal organizations and we are now interested in the sizes of these tribes and communities. Fortunately, in his study of Indian population, Mooney listed the tribes separately.

¹ James Mooney, *The Aboriginal Population of America North of Mexico* (Smithsonian Miscellaneous Collections, vol. 30, no. 7, 1-40, Washington, 1928).

² The population in 1924, including mixed-bloods, was 354,840 (*Americana Annual*, for 1928).

Before turning directly to the size of aboriginal Indian communities, we may consider them in regional groups. This will bear upon the relation between type of life and population, for though independent politically, tribes simultaneously occupying a geographical region usually resemble each other in habits and customs. Treating this Indian population data by geographical groups, we come to the result in the Table. At the outset, we assumed that the amount of land required to support an individual would vary according to the climate and natural products of the region in which it is found. This variation can be expressed by the average number of square miles per person. Thus, if the aboriginal Indian population of New England was 25,000 and its approximate area 66,000 square miles, then there would be available for each individual in that population, the produce of 2.6 square miles. By referring to the table as a whole, the range in this ratio may be observed.

Of the groups listed only one was largely dependent upon agriculture, that comprising the Indians of New Mexico and Arizona. The five groups east of the Mississippi River were, in the main, hunters, but more or less agriculturists also. The others did not practise agriculture and so were entirely dependent upon natural resources. The more unfavorable regions are the great northern Canadian forests and our semi-arid highlands.

ESTIMATED DENSITY OF ABORIGINAL INDIAN POPULATION

<i>Region</i>	<i>Estimated Population</i>	<i>Approximate Area in Square Miles</i>	<i>Square Miles per Person</i>
New England	25,000	66,424	2.6
Middle Atlantic	30,600	99,574	3.2
South Atlantic	52,200	140,739	2.7
Central States	75,300	288,394	3.8
Gulf States	114,400	307,322	2.7
Southern Plains	21,600	200,000	9.2
Plains	119,500	835,000	7.0
New Mexico and Arizona	72,700	236,444	3.2
Central Mountain Region	19,300	432,829	22.4
California	260,000	158,297	.6
Columbia Region	89,300	169,127	2.0
British Columbia	85,000	355,855	4.2
Central and Eastern Canada..	103,750	2,500,000	24.1
Alaska	73,000	590,000	8.1

The estimates for Indian population were compiled from Mooney's tribal list, but the grouping used here differs some-

what from that adopted by him. In estimating the area of regions given in the table, state lines were usually followed, but in case of the Plains, Southern Plains, Central Mountain region, etc., border-line states were roughly apportioned to the two impinging regions. However, the areas given are close approximations to the ranges of the tribes for each region. The population estimates are reasonably equal in probability, are perhaps a fraction too high, but relatively representative. A difference of two square miles per person should have a fair degree of validity.

The most striking density of Indian population is for California, where the native population did not engage in agriculture, nor did they develop elaborate cultures. Altogether the region is regarded as one of the most primitive in the United States. A more conservative estimate of the Indian population of California by Kroeber ³ still gives a ratio of about 1.0 square mile, much lower than that for any other region. As it stands, then, California is the most favorable region for a primitive population. Next in order is the Columbia River Region and the country around Puget Sound. If a special table were compiled for a coastal belt of one hundred to two hundred miles from the mouth of the Columbia to the southern boundary of Alaska, the result would be a ratio of about 1.2 square miles per person. Vancouver Island is listed as populous, with a ratio of 0.7 square miles per person, or about the same as California. We can say then that the whole Pacific Coast belt from the Gulf of California to Alaska was the most favorable area for the maintenance of the aboriginal population. Whether the differences were actually as great as estimated, is uncertain, yet the ratio between the present and the estimated aboriginal tribal population for the United States tends to be generally constant, that is, one-third to one-half, which regularity justifies taking the ratios in the table as roughly relative. The reader familiar with the geography and early history of the several regions, as given, can extend the analysis and verification in detail, but we have gone far enough to form a general notion of what a primitive population is like.

³ A. L. Kroeber, *Handbook of the Indians of California* (Bulletin 78, Bureau of American Ethnology, Washington, 1925), 490.

SIZE OF THE PRIMITIVE COMMUNITY

We have noted that the size of the primitive community will vary according to the environment and the form of life, but it is conceivable that there are limits to the range in size. It is clear that three or four adults cannot support a series of social institutions; hence, there must be an approximate average minimum for each region and for each type of life. On the other hand, there will also be an upper limit in size, because too great a concentration will prevent adequate feeding, fueling, etc. When all the necessities of life must be carried on the backs of men and women, the area from which subsistence is drawn will be reduced to walking radius. We should expect, then, to find primitive peoples living in small groups. In the previous note on the estimated population of aboriginal America we cited California as a region of density, but this was not due to over-sized communities. Referring to the Indians of California, particularly the Yokuts, occupying about one-eighth of the area of the state, Kroeber says:

The prime factor of uncertainty is the size of the tribe. Two hundred and fifty souls seems an overconservative estimate. There may have been tribes that surpassed 500. On the other hand, this latter figure appears to be excessive as an average. It is difficult to say why, in the absence of any evidence bearing directly on the point; but the nature of the country, the descriptions of travelers, and the Indians' statements as to their great-grandfathers' customs, somehow leave the impression that the Yokuts tribe did not so very much exceed the usual California village community in population strength. But again, the consistent adherence to the principle that each tribe possessed its peculiar dialect warns against setting the figure very low. Three to four hundred persons is perhaps the soundest estimate that can be made, and with 50 or nearly 50 tribes, this would yield from 15,000 to 20,000 souls for the entire group. . . .

We have one check on the estimate of 300 to 400 souls per Yokuts tribe that underlies this total. In 1806 Moraga marched up half the length of the San Joaquin Valley and returned with the names of more than 20 groups and estimates of their numbers. Most of these must have been Yokuts, and about half of them can be identified.

Five thousand six hundred and twenty people in 23 groups yield an average of less than 250; or, if we divide the 3,360 known to have been Yokuts by 12, the result is 280 per tribe.⁴

This estimate would give a density of 1.0 to 1.4 square miles per person, the ratio which Kroeber takes for the state as a whole.

In the main, these estimates are typical of California as a whole, and the actual village was often still smaller. Yet, since we are concerned with the independent community, or tribe, we should count as one the neighboring villages that cooperate in maintaining the tribal government and culture. We may accept, then, the estimate of Kroeber, that the size of a tribal or culture group in aboriginal California ranged from one hundred to five hundred souls; the average, or the normal size falling between two and three hundred. A review of the data for Vancouver Island and the Puget Sound Area, in general, gives an average of two to four hundred for the group, and the old French estimates for the Indians of Louisiana range around three hundred per village group.

The distinctively aboriginal village dwellers of the United States are the Pueblo Indians of New Mexico and Arizona. The Spanish estimates around the year 1680 give a range of five hundred to one thousand per village, the average being about eight hundred. This is about twice that of the other Indians. To feed a village of one thousand persons, mostly grain eaters, would, according to modern diet tables, call for about ten thousand bushels of maize per year, probably requiring from five hundred to one thousand acres. A Havasupai estimate by Spier, shows one hundred acres cultivated to support one hundred seventy-seven persons; ⁵ the yield per acre is not given, but the statement as it stands is consistent with the above estimate. Since only narrow strips of land along streams could be used in this environment, the distances traveled to cultivate a thousand acres would be considerable. In general, then, a tribe of Indians in the United States and Canada, operating as a social unit, living in neighboring camps, would rarely ex-

⁴ A. L. Kroeber, *Handbook of the Indians of California*, 488, 491.

⁵ Leslie Spier, *Havasupai Ethnography* (Anthropological Papers, American Museum of Natural History, vol. 29, part 3, 1928), 98, 230.

ceed fifteen hundred individuals, the actual communities being much smaller on the average.

So far, we have used data for the American Indian only, but these are fairly typical. For example, a study of the native population in Nyasaland, Africa, by P. Dixey, shows for the province as a whole over 1,290,000 persons, which, as compared to the data for the estimated Indian population of the United States, gives a high ratio, or one person to about 0.035 square miles. Naturally different sections of the province show different ratios, this being the average; some localities in which commercial crops are raised, as cotton, tobacco, etc., show a density of more than six times the average, whereas in others, less favorable to white exploitation, the ratio falls almost to zero. It is important to note the following statement:

The average number of inhabitants in the villages of the various districts in Nyasaland ranges from a minimum of 57 in Blantyre to a maximum of 259 in South Nyasa; there are only 18 villages with over 1000 inhabitants and only 86 with 500 to 1000 inhabitants. Kota Kota township is formed of a number of villages with an aggregate population of 5438, mostly concentrated within an area of about one square mile. Mponda's village near Fort Johnston is the largest individual village and has a population of 2562. There are only three districts, namely West Nyasa, South Nyasa, and Lower Shire, with any considerable number of large villages.⁶

In Australia, though the available data lack definiteness, what may be called a tribal unit comprises small local groups of fifty to one hundred individuals each. The few estimates made suggest the size of a tribe to range from a few hundred to something less than two thousand. This is consistent with the estimate of 160,000 as the total native population of Australia⁷ at the time of discovery, about eighteen square miles per person. The Eskimo, who live in an environment unfavorable to large groups, form camps of twenty to sixty persons each, and this is about the range for the Chukchee peoples of Siberia.

The reader can extend this review of primitive populations

⁶ F. Dixey, "The Distribution of Population in Nyasaland" (*Geographical Review*, vol. 18, no. 2, 274-290, 1928), 279.

⁷ S. H. Roberts, *Population Problems of the Pacific* (London, 1927), 86.

further, and though regional variations will be encountered, it is safe to say that the political primitive unit will rarely exceed two thousand souls, and these units will be found subdivided into communities of one or two hundred each. Bearing in mind that such a political unit may have a distinct language and that some of the communities composing it may have separate dialects, we see how even a relatively small number of human beings may maintain a complete social and economic system.

THE STABILITY OF PRIMITIVE POPULATIONS

The impression derived from the preceding discussion is that a primitive group reaches a balance between its environment and type of life, and that as long as this balance is maintained, there will be little or no variation in numbers. While this is logical, we lack the necessary data to estimate the stability of either the environment or the mode of life. In the course of this discussion, we shall become acquainted with the varying character of group life, for while some tribes may be slow to change, others seem to change quickly. The environment is also subject to change. The presence of primitive hunters is a factor disturbing to other forms of life, and even though the hunter may adjust himself to the game supply, it is doubtful if his ecological setting is wholly stable.

Students of modern national population believe that growth and decline in numbers follow certain laws, and, if these are biological laws, then they may be expected to operate in primitive populations as well. War and pestilence are older than civilization and may sometimes have eliminated entire groups, but, on the other hand, there is reason to believe that tribal populations have their periods of expansion, and then, sooner or later, start on the road to extinction. Thus, at the time America was discovered some tribes were passing out, others were expanding. Living tribes have traditional knowledge of neighboring tribes that have become extinct. However, most of our information begins with European contact with primitive peoples, which is believed to result in the immediate decline of the latter. This is fairly evident in the foregoing information on the original Indian population of the United States.

That primitive populations always decrease in contact with Europeans is, however, not certain. The initial contacts usually led to bloodshed, ending in the subjugation of those that survived. Also diseases introduced by Europeans took a heavy toll. But as soon as the natives were subdued and somewhat immunized, they showed a tendency to hold their own and later to gain in numbers. Of course, this is not true of all primitive groups. Pitt-Rivers, one of the recent students of this subject, has proposed a correlation between the sex ratio and decline in numbers.⁸ According to this theory, a declining population is accompanied by a marked excess of male births, and an increasing population by an excess of females. It is well known that a marked excess in males appears in Melanesia and that, in the main, it is accompanied by a declining population, but it is not certain that such a condition always occurs, or that one is the cause of the other. Nevertheless, Pitt-Rivers has given the theory strong support and it seems to hold for the native populations of the Pacific Islands. As suggested, this hints that the cause lies in biological factors, or that the balance between the sexes, necessary to the normal life of a community, is sensitive to factors still undiscovered. Experiments with animals suggest that tendencies to excessive male and female births may become hereditary; if the human sex ratio is also transmissible from generation to generation, then in a small inbreeding tribal group, a tendency to marked excess in male births might continue indefinitely and, as the Pitt-Rivers theory assumes, might lead to a decline in the population. However, until more study is given this subject, we are not justified in assuming that the causes producing declining populations operate through a disturbance of the sex ratio. This is one of the many problems in human biology calling for intensive investigation.

The question at issue in this discussion and one which must be taken into account in the formulation of our conception of primitive community life, is that of the stability of the tribal organization. It may be suspected that a decline in numbers will eventually break down this organization and result in a loss of tradition and technique necessary to a continuance of

⁸ George Henry Lane-Fox Pitt-Rivers, *The Clash of Culture and the Contact of Races* (London, 1927), 245 seq.

life upon the old level. Actual observation of tribes in contact with Europeans shows that such dissolutions take place, but we have no certain way of retrieving the history of native life in Australia, America, and elsewhere, before Europeans burst upon the scene, except by archæological methods. In general, archæological research can tell us little about tribes; it does reveal sequences in pottery and in other resistant materials, but whether the tribal organization served as long as a given type of pottery or stone implement is a question archæology is powerless to answer. So we must base our estimate of the life span of the tribe upon information concerning living tribes. This also is meager, but what there is suggests that the specific tribal organization ranges from three hundred to five hundred years. The community may hold out longer, but there is reason to believe that a thousand years would distinguish a community as the oldest inhabitant, though by shifting population and regrouping, a tribal type might well continue for a longer period. In any case, it seems unlikely that many centuries would pass without significant changes in the mode of life.

So, at the very outset of our review of human community life, we should note that while the community exists many times longer than the longest lived individual, it is nevertheless mortal. In contrast to modern life these communities may seem fixed and consequently stable, but still they do change.

THE ECONOMIC CONTROL OF POPULATION

About the year 1798 Malthus, an English economist, proposed a law of population growth; viz., that food increases in arithmetical ratio, whereas populations increase in a geometric ratio. This theory has been seriously questioned, but it is frequently admitted that unless a people can make food production keep pace with the natural increase in numbers, the death rate will rise until a balance is reached. A hunting population cannot kill an excess of game without facing starvation. The Eskimo, for example, live on a close margin. As Rasmussen says of them:

there is no superabundance of food in these regions. There are, of course, times when more game is killed than can be eaten at

once, especially during the great caribou hunting season, in autumn, or when the salmon fishing in summer is particularly good. But on the other hand, we have to reckon with periods in winter when weeks may pass without any possibility of procuring food; it is therefore absolutely essential to have a store in reserve. Life is thus an almost uninterrupted struggle for bare existence, and periods of dearth and actual starvation are not infrequent. Three years before my visit, eighteen people died of starvation at Simpson Strait. The year before, seven died of hunger north of Cape Britannia. Twenty-five is not a great number perhaps, but out of a total of 259 it makes a terrible percentage for death by starvation alone. And yet this may happen any winter, when there are no caribou to be had.⁹

Nor was winter starvation unknown to the Indians of eastern United States, as their mythology suggests. In other words, the assumption is that for a given locality and for each type of community life, there is an upper limit to the population. That there is also a lower limit to the size of a hunting community is shown by the necessity for reserve hunters and for defenders of the community. A single hunter and his dependents presents too great a hazard, even in a country rich in game. This suggests that for each situation there may be an approximate ideal number of individuals to carry on most efficiently. Stated in general terms, this is the conception of an optimum density in population, as discussed in current economic literature:

within any group in any primitive race, the members of which cooperate together to obtain their food from a definite area to which they are confined, the principle of the optimum number holds good. There is, that is to say, taking into account the abundance of game, the fertility of the land, the skilled methods in use, and all other factors, a density of population which, if attained, will enable the greatest possible average income per head to be earned; if the density is greater or if it is less than this desirable density, the average income will be less than it might have been. Obviously it must be a very great advantage for any group to approximate to this desirable density. There are three possibilities open to any group. The desirable number may be approached, it may be exceeded up to the point where men can only just exist,

⁹ Knud Rasmussen, *Across Arctic America* (New York, 1927), 223.

or it may not be reached. Extreme departures from the optimum number must be very disadvantageous; if numbers increase until they are limited by starvation only, then no benefit arises from the use of any skilled methods that may be known. Under such circumstances all inventions in the methods of hunting, fishing, and cultivating the ground profit nothing. Social conditions must also inevitably be unstable where starvation alone limits numbers.¹⁰

This idea may be expanded to cover the whole round of community life, because a community is a cooperating group, not only in matters of sustenance, but in all the functions of society. A full and well-rounded community life would result only when the ideal number of individuals approximated the ideal optimum number. Our previous review of data from sample regions for primitive life suggests that for hunting and fishing peoples, two or three hundred is the optimum. With respect to food, we must bear in mind that the game supply must be sufficient to enable the hunters for the community to secure the necessary return by a reasonable work period. Further, it stands to reason, that to be successful, hunters must be well nourished.

In proposing that a control of the size of the primitive group exists, we do not necessarily mean that when the people become too numerous they starve, though such may be their fate, but that the community adjusts its life to stabilize its size. This may be done in several ways—by stimulating fighting with their neighbors, by emigration of surplus numbers, by infanticide, by restricting marriage, etc. Infanticide seems to have been general with all peoples, except a few modern nations. It is, in fact, the method most easily administered by primitive man. Recalling that the primitive woman must carry and nurse the child for several years, the birth of a second within a year or two of the first, would create a difficult situation, the probable result of which would be death to one or more of the trio. So, in considering the operation of the optimum population principle, we must take into account man's capacity for social control over the size of the community. So far, however, we have considered hunting communities only. As previously suggested, the introduction of agriculture, improved methods of

¹⁰ A. M. Carr-Saunders, *The Population Problem, A Study in Human Evolution* (Oxford, 1922), 213.

transportation, new processes of food preparation, etc., made possible an increase in the optimum number. It is not difficult to show that this is a reasonable expectation. On the other hand, the increase was not rapid in the modern sense, but what seems to have happened was that the number in the community rose to a new optimum and was then stabilized for a time. This is consistent with the observation that certain obvious methods of population control, such as infanticide, occur among peoples of diverse economic type. In other words, the necessity to limit numbers arose everywhere when the optimum number was approximated.

To complete this sketch of population control consideration might be given to the causes for the decline of populations and the effect of such decline upon the size of the community. The data on primitive populations suggest that the community may, in part, adjust itself to a declining population in this way: when a community becomes too small, its members may be absorbed into a neighboring community; particularly is this to be expected when several communities in a given region suffer serious simultaneous decline. We have noted that the presence of a civilized people—as when Europeans settled in America, Australia, etc.—often results in rapid general decline in primitive populations, and in these instances the number of communities has been observed to decrease through such unions of remnants. The adjustment of community size to declining populations is, however, a subject to which little attention has been given, so we can do no more than note the suggested reciprocal relation between the optimum number and the economic basis to community life as offering an opportunity for research.

INBREEDING

One important biological aspect of the primitive tribe is that it is an inbreeding group. The community unit may be so small that the usual reluctance to associate with near relatives prevents inbreeding within the unit, but in such cases one of the nearby community units of the tribal body will furnish the wife or husband, as may be required. Thus, there is inbreeding within the tribe. How narrow such inbreeding may be, we can

now estimate from our knowledge of primitive populations. We have seen that sixteen hundred people may form a tribe, the expectation being that the number will average less. If communities, or local groups in this tribe, average one hundred persons, then each community would approximate fifty of each sex. A liberal estimate of the number of each sex between the ages of fifteen and forty would be twenty. With these numbers in hand, assuming that individuals will marry out of their community, it is suggested that the reader calculate the range of choice of a mate and the closeness of blood relationship. In any case, we see the conditions favorable to the establishment of a tribal type with respect to such hereditary anatomical characters as eye color, nose form, bodily proportions, etc. What one usually observes in such an inbreeding tribe is a more or less uniform cast of countenance, such as we speak of in our own population as a family resemblance. The social customs of primitive peoples also tolerate more freedom of mating than do Christian nations, which again would tend to standardize the tribal type rather more than otherwise.

Later, we shall consider the various marriage systems of primitive peoples, especially the unique system of Australia, in which the members of a tribe may be apportioned among eight classes, paired so that members of Class A can only marry those of B, C, or D, etc. In the case of a tribe sixteen hundred strong, each class would average about forty females between the ages of fifteen and forty, or two to three reaching marriageable age each year. The male, therefore, would have little or even no choice. The relationship of these groups is usually so ordered that only second cousins, or persons on this third generation level may marry. In this way close inbreeding goes on without violating the usual standards of incest. Many tribes, however, have but four of these classes, in which case marriage might be on the second generation level, or a man marries his mother's brother's daughter. By constructing a genealogical diagram, the reader can work this out (see p. 146). In practice, the system of four classes might result in more intensive inbreeding than one with eight classes.

Primitive groups are also largely polygynous, the older and

stronger men taking the eligible girls to the disadvantage of the younger men; if marriage restrictions were rigidly enforced this would increase the degree of inbreeding, but no one has observed primitive practices closely enough to give a justifiable statement as to the biological relation of the children to the male head of the polygynous family. In native theory all children of a man's wives are his children and they are brothers and sisters to each other. It is also a frequent custom for a man to prefer sisters for wives, which again brings the family strains into closer relation.

The local group in Australia, it is said, tends to be a family group with a grandfather as the head; however, some of the larger groups have been observed to comprise the families and descendants of two or more brothers and their wives. In either case, the children of each generation would be so closely related that the frequent primitive tendency to regard them all as brothers and sisters is easily comprehensible. But again very close inbreeding, or incest, is avoided by cousin marriage through the mother's own generation, which, of course, necessitates marrying into another group. All this will be considered in greater detail in our discussion of social organization; we have gone far enough to see that though the community may, because of its limited size, be an out-breeding group, yet, because of the limited number of such communities in the tribe, the tribal group as a biological entity becomes almost wholly inbreeding. This is not to deny that occasionally a few alien individuals are absorbed or that visitors may introduce some new blood, but these are usually minor factors.

THE CLASSIFICATION PROBLEM

Soon after the world had been circumnavigated, that is, when it was certain that the world was round, and that all the important lands had been discovered, scholars began to sense a world unity, or to see it as a whole. So many new plants and animals had been observed, that some classification seemed necessary for practical reasons, if for no other. The early attempts at botanical and zoological classification were, on the

whole, perfunctory, because no one had yet conceived how living forms were related, or had hit upon an objective classification that was consistent and empirical, so that it could be verified at any and all times. Linnæus (1707-1778), who is regarded as the founder of systematic biology, was the first to develop the concept upon which the present system of classification is based. He not only sketched the outlines of the present schemes for plants and animals, but established the Order of Primates in which he placed man. Thus, in a way, he may be said to have put man into nature, taking a point of view biologists have consistently held to this day. It is to Linnæus, also, that we owe the species term for man, *Homo sapiens*. He went farther, and upon the basis of what was then known concerning mankind, proposed four races, white, black, red, and yellow. In general, these terms are still used to designate the mass of mankind. This classification, however, was based upon skin color, which is still an important diagnostic character, but because of variations and gradations in these colors, is far from satisfactory. Of course, Linnæus did not go far with the human problem, but by his genius for biological systematization and because he made classification the new scientific lead of the time, the classification of man according to his bodily structure became a desired objective.

Yet, such broad classifications do not help much in classifying the various tribes of men; in dealing with these, smaller differences must be taken into account. So there followed the studies of Blumenbach and Camper who introduced head and face form as important criteria; finally, Retzius used the cephalic index and thus reduced the description of tribal types to measurements and ratios. Photography being unknown at the outset, the portrait painters of the time were close students of proportion in head and face, and were frequently cited as authorities in matters of race comparison. Thus, the European painter, Smibert, coming to America in 1739, was struck by the resemblance of the Indians he saw to the Tatars of Asia, some of whom he had previously painted while on a visit to Russia. This idea was supported by the American traveler, Ledyard, and so became the established view. However, the chief American contributors to physical anthropology were

Nott (1804-1873) and Morton (1799-1851). Both were physicians and so versed in anatomy. The former, in association with an Englishman, named Gliddon, issued two famous works, *Types of Mankind*, 1854, and *Indigenous Races of the Earth*, 1857, in which a synthetic view of mankind was attempted. These went through ten or more editions. Morton was, however, more inclined to research and consequently is often spoken of as the founder of physical anthropology in America. He gathered about 1000 crania from many parts of the world, devised a method of measuring cranial capacity by filling the brain cavity with mustard seed, and improved and extended the number of measurements previously made upon the head and face. Among his conclusions, derived from the study of the crania in his collection is, that all modern or extinct Indians with the exception of the Eskimo are of the same race. Thus, before the Civil War in the United States, the description and comparisons of crania were well established as a method for classifying groups of men.

Even in the early days of its history, physical anthropology was appealed to for evidence in favor of or against specific social questions. The rise of Negro slavery in the United States and its final abolition in England and America, focussed attention upon the Negro and his relation to other types of man. Reluctance to admit that the Negro and the European sprang from the same ancestry produced well-argued theories for the independent origin of races, which would, of course, deny the "common brotherhood idea." Most of the early leaders in anthropology, however, rejected the independent origin theory, chiefly on the ground that all known human beings will produce offspring when crossed. Nevertheless, the opinions of many and perhaps all anthropologists are warped by the social pressure of their time; thus, we note that Morton, mentioned above, favored the multiple origin of man and Nott and Gliddon, being Southerners, strongly advocated it. But to follow this argument to its ultimate conclusion would take us into a discussion of present-day race problems, a matter with which we are not now concerned.

THE PROBLEM OF THE GROUP

In a preceding section we considered the tribe as an inbreeding group. Any such group of individuals presents more or less variation, as in stature, arm length, size of head, etc. For this reason, no one individual can be regarded as representing the group; the range of variation must be taken into account. The methods of describing crania as well as facial features in the living, just discussed, are satisfactory when dealing with single individuals, but are not effective in dealing with the range of variation. For this anthropologists use the method of averages and standard deviations. What is now called anthropometry is the study of living groups based upon measurements for a sample number of individuals in the group. One of the first to employ such bodily measurements was Charles White (1728-1813) who discovered that the forearm of Negroes is relatively longer than in Whites. From this time on, measurements on the body were made and observations on the hair and eyes recorded. Especially was it the rule in Europe to measure army recruits, a practice continued to this day. The conception that the inbreeding group approximates, in size and form, a type around which the individuals vary symmetrically, was first given prominence by Sir Francis Galton, or, to put the matter in another way, he first approached biological variations in the group by what are called statistical methods. This is the biometric method now universal in biology, especially in genetics, with the details of which the reader is probably familiar. Karl Pearson, the English mathematician, succeeded Galton and is responsible for many of the methods now used in biology and in one of its human divisions, physical anthropology.

The important point is, that the rise of the biometric method is due to an insight into the biological problem of the human group, the discovery that in common with other living forms, an inbreeding human group is an entity and can be defined in terms of measurement, and that in this way groups can be compared and, if desired, classified. Human biology is in this respect but a part of biology, so the point of view and the method in the study of the human group are the same as in the study

of other living forms. It so happens, however, that primitive man is so completely dominated by community life that he lives in these small, relatively self-contained groups, instead of spreading out thinly over a large area, as is the case with mammals generally. This congregating in inbreeding groups favors the development of group individualities, such as differences in size, proportions of the body, shade of skin color, form of hair, etc. It is the concept in biometrics, however, that these individualities are hereditary and that they approximate a mean, or a type, which can be determined by statistical methods.

THE BIOMETRIC TYPE

If one sets out to study group types by the statistical method, he must make a choice as to the measurements and observations to be used. It does not follow that because two human groups differ in stature, they will also vary in the color of the hair, or even in the size of the head. The reader of anthropological literature can easily find examples of very tall people with light hair as well as tall people with dark hair. As a rule, however, groups will differ in many characters and it is the custom to describe a tribe or a community by examining a hundred or more individuals, making a number of measurements and calculating a number of proportions, or indices. As a minimum, record is made of hair form and color, eye form and color, skin color, form of nose, and lips. Stature, sitting height, breadth of shoulders, length of arms, length and breadth of head, height and width of face, breadth and height of nose are measured. For technical details on these and other measurements the reader is referred to the special handbooks on the subject,¹¹ our concern now being with the basic concepts underlying the procedure.

There seems to be some confusion among anthropologists as to the objective in making these measurements and observations, but all are agreed that this is the most satisfactory way

¹¹ Louis R. Sullivan, *Essentials of Anthropometry* (Revised by H. L. Shapiro, American Museum of Natural History, New York, 1928); Harris H. Wilder, *A Laboratory Manual of Anthropometry* (Philadelphia, 1920); Aleš Hrdlička, *Anthropometry* (Philadelphia, 1920); Rudolf Martin, *Lehrbuch der Anthropologie in Systematischer Darstellung mit Besonderer Berücksichtigung der Anthropologischen Methoden* (Jena, 1928).

to describe the group type. It is assumed that the reader is familiar with the fundamental conceptions of the statistical method and the biological phenomena to which they apply,¹² that in an inbreeding group of living forms, each character and dimension will approximate a mean value and that variations from this value will occur in an orderly manner, resulting in a distribution curve which tends to take a universal form. Deviations from that form are taken as indicating lack of homogeneity in the group, recent intrusions of new blood, etc., in which case the individuals involved could, if desired, be sorted out into two or more subdivisions in which variations from their respective means would take the universal form. So long as a group continues on an even course of life, these means are regarded as relatively stable. Hence, once determined, they are expected to hold for a number of generations.

A single character, or mean, is rarely sufficient to distinguish one group from another, but a number of them usually serve that purpose, because they are often biologically linked and so occur together in the same individuals. The practice is, then, to define the group type by giving average dimensions and proportions, with a few qualitative determinations. For example, groups of natives in the Samoan Islands, Hawaii, Marquesas, and Tonga, are described as follows:

	<i>Samoa</i>	<i>Hawaii</i>	<i>Marquesas</i>	<i>Tonga</i>
Hair color ..	black	black	black	black
Hair form ..	straight	straight	wavy	straight
Eye color ...	dark brown	dark brown	dark brown	dark brown
Skin color ..	medium brown	medium brown	medium brown	medium brown
Stature	171.7	169.5	170.3	173.0
Head length..	190.6	187.8	193.2	191.0
Head width..	154.8	157.6	153.3	154.8

Naturally, one objective in such descriptions is classification according to degrees of similarity. Closely similar groups, such as the Samoans, Hawaiians, Marquesans, and Tongans just noted, will be classed as regional types, to which the class name Polynesians is given. In a later section, we will note the difficulty of making an inclusive classification for mankind and also that the gross divisions of man are based upon distinctions in one or two characters, such as skin color and hair. To these

¹² See Herbert Eugene Walter, *Genetics, An Introduction to the Study of Heredity* (New York, 1922), and any handbook on statistics.

may be added the cephalic index, or the ratio between the length and breadth of the head, a time-honored method of defining types. Thus, the Mongoloid peoples of Asia are said to be round-headed, the Negroes of Africa and the Australians, long-headed, while Europeans are, for the most part, intermediate.

However, the ultimate objective of biometric studies, when applied in the anthropological sense, is to discover ancestral relationships. It is generally assumed that groups, or tribes, having closely similar measurements, proportions, and qualitative characters, are subdivisions, or offshoots, from an original parent group. In the large, it is assumed that the Mongoloids, including the American Indians, are an ancient branch of the human family; another such branch would be the Negroid peoples of Africa. In anthropological research, however, we must deal with tribal groups relating them to one another. On this level little progress has been made, other than to set up tentative classifications which are geographical rather than indicative of biological relationships.

In general, then, the lead to the biometric study of man was the discovery that each human group tended to transmit its bodily characters to its descendants, and that, though the rule was for individuals in such a group to vary from one another, these variations followed a law, expressible in mathematical terms; in consequence, it was possible to discover the type in a group notwithstanding the individuals composing it varied from one another.

HEREDITY AND ENVIRONMENT

Biologists regard such group differences as we have just considered as due to two factors, heredity and environment. The former perpetuates by passing on to offspring the characteristics of the parental stock and thus tends to hold the type true to form; the latter is believed to favor changes in size and proportion of the body. In the case of human groups, environment includes the mode of life. There is still a clash of opinion as to the character and amount of change in the biology of the group attributable to mode of life and to the external setting. It has been observed that the descendants of Euro-

pean immigrants into the United States show differences in bodily size and form from the corresponding generation remaining in the native country;¹³ also, a study of Russians¹⁴ during the famine periods following the World War shows how markedly the form and size of the body are modified by the amount and quality of food. Even in countries not reduced to starvation, it was observed that during the World War and for a few years thereafter the stature of army recruits decreased, but that later it began to rise and is now approaching its pre-war level. All of which suggests that the mode of life can bring about changes in the community type. On the other hand, biologists are aware that changes occur spontaneously within an individual and that many of these are transmittible by heredity.

We have, so far, considered only such aspects of the human body as can be measured on the living or upon the skeleton. Psychologists believe that groups also vary in their responses to situations and have devised methods for measuring these and treating the results statistically. Such tests have not been applied extensively to primitive groups, so one cannot say in how far this method of inquiry will reveal group individualities and so serve as a basis for group classifications; yet differences do appear in the few trials made, and there is ground for expecting that differences in this respect will be both hereditary and influenced by mode of life.

A specific human group, then, may be expected to differ from other groups in stature, bodily proportions, and psychological characters. We shall see later that it differs in its mode of life also, and we can then consider the part environment may play in emphasizing these differences.

HOW A GROUP GROWS

Though it is quite important to know how a population grows and stabilizes its anthropological characters, and there

¹³ Franz Boas, *Changes in Bodily Form of Descendants of Immigrants* (reprinted from the Reports of the United States Immigration Commission, New York, 1912).

¹⁴ Alexis Ivanovsky, "Physical Modifications of the Population of Russia under Famine" (*American Journal of Physical Anthropology*, vol. 6, no. 4, 331-353, 1923).

has been a good deal of speculation on the subject, no careful study has been made. The subject cannot be approached experimentally, and the time required for marked changes is so great that direct observations are out of the question. Such a situation invites speculation. A careful scrutiny of the distribution of peoples over the earth, gives the impression that large bodies of peoples like the Bantu-speaking Negroes of Africa and the Algonkian-speaking Indians of North America, represent the expansion of single groups. The justification for this impression lies in the history of the peoples of western Europe who have now expanded over large areas. We shall see, also, that the study of language has brought to light genetic relations in tongues that are best explained by assuming an original parent group. When a group becomes too large for its mode of life and economic setting, it divides or throws off the nucleus of a new group. For the time being, barring possible selection, this new group will be a biological, linguistic, and social replica of the parent group. And if it keeps close contact with the parent group and intermarries with its members, the two groups will differentiate slowly, if at all. Further, this process may go on until there are a number of such related groups.

If these groups continue as neighbors they may be federated or even closely organized under a single governing body and so constitute a tribe; this tribe may, because of increasing population and through the multiplication of community groups, become strong in numbers. In our previous discussion we considered the optimum size for the tribe, noting that under primitive conditions the tribe is rarely large. So far as can be observed, when a tribe grows large, it also may divide or throw off a new tribe. Once separated, their contacts would be less frequent and less friendly, and the conditions would be favorable to change in blood, languages, and modes of life. This process of throwing off new tribes may, under favorable conditions, go on rapidly in an increasing primitive population, and if other peoples are to be displaced or exterminated, the expansion may go on continuously, as in case of the Algonkian-speaking Indians of North America, comprising many tribes occupying about one-fifth of the total continental area. As a

rule, all tribal groups speaking languages of one family occupy contiguous territory and so present solidarity on a linguistic map. This strongly hints at a rapid expansion by division of the tribal groups.

We have spoken so far largely in terms of language, but we are at present more interested in the bodily type of these groups. As we shall see later, it is easier to group tribes by language than by biological type, because language is highly standardized in the group, everybody speaking much the same, whereas the individuals vary a great deal in size and feature so that the type is revealed only by detailed study and the application of statistical methods.

When tribes closely federate or come under the control of an organizing body, especially of a military despot, standardization of language and mode of life takes place, resulting in what we speak of as a nation. If all the tribes originally comprised in such a nation were of the same linguistic family and mode of life, we would expect the biological type to be fairly homogeneous; but as we know the situation in the Old World to have been, conquerors subjugated peoples of diverse biological types, and when such diverse peoples are brought under one political system and intermarriage facilitated, a general mixture results, which may, in due course, become stabilized and so constitute a new type. The Japanese people, for example, are believed to be a resultant of an original Ainu population crossed with Mongoloid conquerors. In general, then, a large national population may be the result of the expansion of an original homogeneous tribe, or of the absorption of conquered tribes of varying biological types. The languages and customs of the conquered tribes may be displaced in a generation or two, if the ruling power so decrees, but if a subject people are permitted to survive, their blood will enter into the population and under certain conditions dominate. However, without historical data it is impossible to determine the type that originally entered into such a population; the conclusion, if any is arrived at, will be theoretical and in large part speculative. A good example of this is to be seen in the Polynesians, occupying the several large groups of islands from New Zealand to

Hawaii, who, on the whole, seem to be one type of people. Yet, anthropologists who have studied them carefully, believe them to be a mixture of Negroid, Indonesian, and other elements. This, however, can scarcely be proven with the data at hand, it is an inference drawn from the resemblances of certain traits shown in the population to peoples in other parts of the world. One weak point in such studies is our lack of knowledge concerning the way in which bodily characters are inherited. It may be doubted if any safe interpretation can be placed upon the mere analysis of the anthropometry of a population until the characters involved have been studied genetically.¹⁵

THE GREAT DIVISIONS OF MANKIND

Probably the most striking differences in man are in the shades of skin color; next in order are hair form and color. Linnæus, as noted, made four sub-species, according to pigmentation of the skin: black, white, red, and yellow. These correspond, in the main, to the terms, Negroid, Caucasoid, Americanoid, and Mongoloid. It is also observable that each holds a large area as its own. So long as we do not try to make such distinctions inclusive of every known tribe, they serve well enough, in that they stand as indices of the largest divisions of man. One difficulty in classifying man according to skin color is the variability of the color and the impossibility of measuring it accurately. On the other hand, the form of the hair appeals to many anthropologists as more practical and precise. For one thing, the form and color of hair tend to greater uniformity than in case of the skin. There are, in the main, three types of hair form, straight, wavy, and woolly; all Mongoloids and the American Indians are straight and black; the Negroids are woolly and black; the Europeans are wavy and vary in color. Upon this basis some authorities set up three great divisions of mankind, instead of four. It is true that hair manifests a tendency to vary also; but, on the whole, these three types of hair offer a satisfactory basis of classifica-

¹⁵ Edwin Grant Conklin, *Heredity and Environment in the Development of Men* (Princeton, 1923).

tion and are believed to represent three old branches of the human stock.¹⁶

Many attempts have been made to arrange existing groups of people according to descent. We have noted how communities and tribes evolve as offshoots from parent groups and the expectation that, once separated, these groups will change in their biological characters. The objective in a biological classification of these groups would be to posit their origins, as revealed in similarities of form and structure. Unfortunately, no scheme of classification so far proposed has proved adequate to express such biological affinities; hence, each writer upon this subject feels free to follow his own ideas of what similarities indicate relationships. As we shall note in succeeding chapters of this book the most effective classifications are those based upon language, mode of life, and geographical range. Of these, the classification by language is the most definite and most frequently taken as the point of departure in an investigation. If biological criteria indicating genetic relationship were once discovered, it is conceivable that a biological classification of man would soon materialize.

THE ANTHROPOLOGICAL IDEAL

It may now appear that anthropology has set for itself a difficult task. Taking the human group as its subject, it attempts to consider it as a unit. As we have said, the group is primarily biological. The individuals composing it may be described according to the size and shape of the head and face, the form and color of the hair, the color of the skin, etc., or even, according to their skeletal remains. Having examined a number of human groups in this way, we may classify them according to their resemblances and thus establish divisions of mankind popularly known as races. One might conceivably restrict himself to such comparative biological studies, but, in the end it is found necessary to know something about what the group does, its social institutions, and its language. Finally,

¹⁶ A. C. Haddon, *The Races of Man and Their Distribution* (New York, 1925); J. Deniker, *The Races of Man: An Outline of Anthropology and Ethnography* (London, 1900); Roland B. Dixon, *The Racial History of Man* (New York, 1923).

the classification of groups, or tribes, under any one of these heads must needs be checked by biological data and vice versa.

Each of these classifications rests upon a complex of detail. For example, a classification based upon the social behavior of the group, economic life, beliefs, political institutions, or the whole round of community life, calls for studies broad in scope, a range, identical, in fact, with that of the social sciences. Anthropologists find that to understand primitive life it is often necessary to specialize on such aspects of group life as marriage, religion, art, social organization, etc. Yet, the ideal in anthropology is to unify the results of all biological, linguistic, and social studies, so that a complete picture of the group may be attained.

While, like most ideals, this may be beyond full realization, it nevertheless defines the point of view in anthropology. Thus, given the name of a primitive group, an anthropologist wishes to know, what are its biological characteristics, what language is spoken, and what is its mode of life. We should add, what is obvious, the place in which the group lives and the geographical characteristics of its habitat. This should make clear that the primary interest of anthropology is in the group, as an objective living community. For practical reasons, one person may give most of his attention to biology, another to language, another to social life, but each will look upon his observations as a contribution to a unified conception of the group as a whole. This is the point of view we take in this book, the emphasis being upon the social life of the group, with due regard to its anthropology as a whole.

When we think of man as a functioning organism, we have in mind his physiological processes, his psychological activities, and his social behavior. For purposes of study these may be considered as distinct phenomena, but when we turn to interpret the human community it is far from easy to distinguish clearly between what is physiological, what mental, and what social, as, for example, in such group practices as hunting deer, or in cultivating maize. A serious attempt on the part of the reader to analyze such acts into their component elements will illustrate the difficulty. Taking life objectively, it appears that the organic, the psychological, and the social aspects of life are

integrated. This will become clearer as we proceed with this survey of human community life. It is the functioning of the living human group that produces community life. This is why the biological basis to group life is important. Throughout our studies it will be well to bear in mind that whatever social phenomena we are investigating in abstract form exist only in the living group.

CHAPTER IV

THE ECONOMIC BASE

The animal world in general is largely occupied with procuring food; with many species there is little time for anything else. Man has managed to find time for other things, but rather through his capacity for cooperation than otherwise. Living as he does in communities of cooperating individuals man can delegate food production to some extent and because of his intelligence he can develop time-saving devices, thus gaining leisure for other pursuits, especially for more elaborate housing and costuming. Nevertheless, satisfactory feeding is the first requisite for community life. Food production must, then, be taken as primary and as the material basis for primitive community life. An understanding of human foods and their distribution will go far in revealing the economic foundation upon which community life rests. The reader need not be told that man's diet varies according to his location and everywhere, whatever the state of his culture, he prefers a combination of animal and vegetable food. Even the Eskimo, who, in the popular mind, is addicted exclusively to a diet of meat and fat, uses vegetable food when it is available. In contrast to the Eskimo, some tribes in tropical lands live mainly upon vegetable food, but gladly add animal foods when they can. To enumerate all the plant and animal species eaten by man in every part of the world is scarcely worth while; even the lists for a single tribe are formidable.¹ Yet, it seems universally true that every community consistently refrains from eating certain available foods. This is not peculiar to primitive man, as is demonstrated in our own attitude toward the eating of snakes, dogs, cats, and insects. Every group has food aver-

¹ Arthur C. Parker, *Iroquois Uses of Maize and Other Food Plants* (Bulletin 144, New York State Museum, 1-119, 1910); F. W. Waugh, *Iroquois Foods and Food Preparation* (Memoir 86, Anthropological Series No. 12, Geological Survey, Ottawa, Canada, 1-158, 1916).

sions for which there are no obvious reasons; the probabilities are that they are not based upon practical considerations. As a rule, however, these aversions are not maintained against the most abundant accessible foods in the habitat of a tribe. For example, a few Indian tribes of the Northern Plains Area of the United States would not eat fish or any other water-dwelling creature; as this region is not well watered and the streams contain small fish, difficult to catch, this dislike imposed no hardship.

Everywhere man shows a tendency to specialize on one or two food animals and a limited number of vegetable foods. Thus, in agriculture, the North American Indian specialized in maize; in some parts of the Old World the leading food was rice; in others, wheat. Among animal foods, the chief domesticated species are cattle, swine, sheep, and goats. Such specialization is natural because more or less elaborate techniques are required in food production and small tribes cannot carry on many such techniques simultaneously. Moreover, even among hunters there is similar specialization, partly due to the technical hunting methods necessary to an adequate food supply. Where population is denser, division of labor and diversification of methods result in a greater variety of foods than is the case in primitive communities. No doubt many other factors contribute to food specialization, but we are at present interested more in the fact than the reasons for its existence.

Man stands out, in contrast to his animal brethren, in the amount of preparation he bestows upon his food. He is the only creature to use fire and it is interesting to note that he uses it as much in food preparation as in protection from the cold. Further, the processes of food preparation are often elaborate, requiring ingenious methods, utensils, and other equipment, which also tend to limit man to one or two main foods. Moreover, there is a general similarity in these main foods; meat is, if possible, obtained from the hoofed herbivorous animals; cereals, or wild substitutes for them, constitute the vegetable staples. Of course, there are a few exceptions due to the idiosyncrasies of certain local flora and fauna, but these may be ignored for the rule is that human communities depend upon two main foods, flesh and seeds.

We have found the human community to be a group of co-operating individuals and since food production is the most basic activity of the group, we may expect the methods followed to be the most fundamental in the division of labor between the sexes and the various age classes. The distinctions between the work of men and women are best seen in food processes. Among all primitive peoples the woman prepares and cooks the food, and almost without exception, such prepared foods are looked upon as her property. Among a hunting people the rule is for the man to kill the food animal and turn it over to the woman to dress, cook, and serve. On the other hand, the woman gathers the vegetable food, and, where the simpler forms of agriculture prevail, is the gardener, leading many to assume that she also originated agriculture and domesticated the plants, but the actual part played by each sex in the development of agriculture is not known. We can only be certain that among hunting people the woman gathers the vegetable foods and in the simpler forms of agriculture does the farming as well. As to the domestication of animals, the parallel suggestion would be that man, the hunter, was the original domesticator. When domestication is practised, the man usually regards the herd as his property and the women assume little responsibility for its care. However, we are not now concerned with the details of labor division among the members of the group, but merely call attention to some of the problems involved. Among these are the apparent correlations between the shifts of specific tasks from one sex to the other and the economic type of group life. Thus, while the tending of the gardens among such hunting peoples as practise agriculture falls to the lot of the women, a primarily agricultural people will regard that occupation as under the leadership of the men.²

HUNTING TRIBES

Recalling the economic status of mankind in 1492, we observe that a large fraction of the surface of the earth was occupied by hunting tribes. Even many of those practising agriculture obtained their supply of meat through the chase. In

² L. H. Dudley Buxton, *Primitive Labour* (London, 1924).

North America, for example, practically all of Canada, except the extreme southern part, is a hunting area, the most important game being the wild caribou. The Eskimo who skirt the coast also hunt the caribou in summer. In no part of this region can agriculture be carried on, so the chief dependence is on hunting. Another large hunting area was the territory occupied by the American bison, comprising the grasslands of our Great West. The Indian tribes of this area are sometimes spoken of as the bison hunters because they supported themselves largely by hunting this animal. In South America the wild guanaco ranged in Argentine and Patagonia and was the chief support of the natives. Fishing, usually considered as distinct from hunting, may be noted here. The drainage of the Columbia River and the streams entering the sea above and below its mouth were the favorite runs of salmon, providing the chief animal food of the Indian tribes occupying that area. In the Old World, where civilizations were more complex, the boundaries to hunting areas are not so clear. In the Old Stone Age all of western Europe was a hunting area and so were probably Africa and Asia. Later northern Russia and Siberia seem to have been ranged by wild reindeer, which even now survive in parts of Siberia. In South Africa the Bushman were primarily hunters. In Australia there was no aboriginal agriculture and so hunting was again the chief occupation. Most islands in the Pacific were agricultural, in part, and chickens and pigs were raised. However, in many parts of the world more or less hunting was engaged in by peoples among whom agriculture and domestication played an important rôle.

As examples of life in hunting areas we suggest reading the literature for the caribou area of Canada and the bison area of the United States.³ It is usual in a hunting area that animal materials, skins, bones, horns, tendons, etc., or the by-products of the butchering, hold a prominent place in the list of raw materials; hence, it is not merely the flesh of the game animal that

³ George Bird Grinnell, *Blackfoot Lodge Tales* (New York, 1903); George Catlin, *Illustrations of the Manners, Customs, and Condition of the North American Indians* (London, 1848); J. A. Allen, *The American Bisons, Living and Extinct* (Memoirs, Geological Survey of Kentucky, vol. 1, part 2, 1876); Warburton Pike, *The Barren Ground of Northern Canada* (London and New York, 1892); Samuel Hearne, *A Journey from Prince of Wales's Fort in Hudson's Bay, to the Northern Ocean* (London, 1795).

is of economic importance, or rather, the group does not merely eat the game animal, but uses the inedible parts as raw materials from which clothing and other necessary objects are made. This is apparent in the culture of the Plains Indians, or bison-hunting tribes, living west of the Mississippi River. Of these tribes, those living near the Mississippi and the lower Missouri practised some agriculture, but their main dependence was upon the flesh of the bison. These animals roamed in herds from the mouth of the Mississippi River, over the prairies and plains, into the adjacent parts of Canada. Before horses were introduced by European settlers, the Indians traveled and hunted on foot, using bows and spears. To kill a bison single-handed was no easy task. These animals were too wary to be approached openly. The usual procedure, however, was for a body of hunters to cooperate in surrounding a herd of bison, driving them over cliffs, into fenced enclosures, into bogs, etc., where the animals could be approached and shot down with bows. In the literature of the subject these methods are often spoken of as bison drives, and the devices employed were often so effective as to kill enough animals to feed the group for weeks. Stalking was practised by hunters, who crawled on hands and knees, covered with wolfskins, or used other devices for concealment. In winter, the carcasses froze and so were preserved for a time, but in warm weather some methods of conserving were practised, such as rendering the fat and preserving the tallow in bladders, cutting the red meat into steaks for drying in the sun or in the smoke of a fire. This dried meat was packed in bags, often in tallow, and frequently it was powdered as finely as possible and stored in that fashion. This last is known as pemmican. However, dried meat was chiefly for use in emergencies; the chase was renewed as soon as the fresh meat supply was exhausted.

Thus, the economic base to culture is broader than the food quest, since other raw materials are needed for comfort and the maintenance of community life. Thus, the skins of bisons made fine robes which constituted the outer garments of these Indians, to be replaced in modern times by the trade blanket. But this was not the only use for bison skins, for, fully tanned, they were used to make tent covers, bags, and moccasins;

treated as rawhide, the same material made food storage bags, the hafting for stone tools, etc. Some elk and antelope were killed and these softer skins were used for the lighter parts of clothing. In brief, dressed skins were used in the place of cloth, strings, and binding materials in our own culture. For thread, bowstrings, and small cords, twisted tendons were used. The leg bones of the bison were used in the manufacture of skin-dressing tools, the ribs for knives and points, and the horns for making spoons and small vessels. Practically no weaving was practised, and though some tribes made a few baskets, skin bags usually sufficed. It is in this sense that the bison, supplemented by a few other game animals, is considered the chief economic factor in the culture of the Plains Indians. The large numbers of bison, their ready accessibility, and the necessity of cooperation in the hunt or tribal organization, all seem to have contributed to the development of large strong tribes in this hunting area. Anyhow, these Indians lived in rather closely organized camps, well disciplined and well led. Each tribe was an organization of bands, camps, or communities, as becomes clear when we trace its life through a calendar year. Though the bison grazed on the plains through the winter, organized hunting on a large scale was impeded, and during this season the tendency was for the bands in a tribe to scatter along small wooded creeks where shelter and fuel were accessible, but to assemble in the spring in a single organized camp and thus hunt until cold weather set in again. The few tribes practising agriculture made a spring hunt, then returned to plant their gardens. When these were harvested, they set out once more on the fall hunt, continuing until cold weather drove them into winter quarters. So it is not only agricultural peoples who are affected by the seasons, but most hunting peoples also change their methods and shift their places of residence according to the seasonal accessibility of game, and the sharper the climatic contrasts in the seasons, the more marked are the changes in hunting methods.

This is clear when we compare the bison-hunting area with the caribou area in Canada. The caribou ranged from Maine to Alaska. Throughout this great stretch the climate is fairly uniform for corresponding latitudes; in the far north is a sub-

Arctic tundra, merging southward into sparse forests, and finally, into the deep forests of southern Canada. Over this area, as we have stated, ranged the caribou, almost the only large game animal in the north; in the south were moose and some deer. Yet, as in the bison area, one animal, in this case the caribou, was the chief dependence of the Indian hunter. In reality a wild reindeer, the caribou feeds in herds and to be successfully hunted must be ambushed, driven into enclosures, into water, etc., by methods closely similar to those of the bison hunters. The caribou, however, are disposed to roam about and those occupying the barren ground west of Hudson's Bay migrate seasonally, shifting north in summer and south in winter, thus reaching the Eskimo country in summer only. In general, however, the Indians occupying this great caribou range manifest similar economic traits, using skins for clothing and making large use of thongs and tendon thread, bones, and antlers. Wherever the country is wooded and birchbark is available, this material is used for utensils and canoes. Fur-bearing animals also abound, and with the coming of the European trader, trapping became an important industry. On the whole, tribal life is simpler than in the bison area, especially under modern conditions, for during the long winter, the Indians scatter in tiny groups, congregating again during the short summer, when tribal life is in full swing. Yet, these tribes are smaller, and their political organization much weaker than is the case in the bison area.

These examples may suffice to give some idea of economic life among hunting peoples, since detailed accounts can be found in the literature pertaining to these and the other hunting areas previously enumerated. One of the striking social aspects of such hunting methods as we have described is the teamwork demanded on the part of the men and the opportunity this presents for leadership and close tribal organization, and, in this association it is well to note the attitude of primitive man toward strangers. From the hunting of wild animals, it is but a step to the hunting of men for what civilized observers of primitive peoples often call war is really man hunting, such as the head-hunting of the Malaysians and the scalp-taking of the North American Indians. It is also plain that the or-

ganized teamwork in hunting and its dangers and adventures played their part in preparing the hunters for encounters with their own kind.

DOMESTICATION OF ANIMALS

Assuming that hunting was the earlier form of existence, we may suspect that the familiarity with animals and their habits gained by the hunters led to domestication. Some investigators believe that the dog was the first domesticated animal, mainly because he was, even in early times, widely distributed both in the Old and in the New World. However, from an economic point of view, the most important domestic animals are, the ox, reindeer, sheep, goat, hog, horse, ass, camel, and elephant. The history of their initial domestication is not known, but what evidence there is may be found in the works devoted to these subjects.⁴ As we have just considered the wild caribou hunters of North America, we may logically pass to the hunting and domestication of the reindeer in the Old World. The caribou and reindeer are closely related species.

In the Old World, reindeer ranged in recent times over the whole stretch of country from Kamchatka to Scandinavia and in many places as far south as 52°, North Latitude. In Palæolithic times they were found in France and Spain. Wild reindeer still exist in parts of this range and in Siberia are hunted regularly. On the other hand, domesticated reindeer are in use from Lapland to eastern Siberia. A few tribes living near Bering Sea do not rear them, but otherwise their distribution is approximately universal. The history of reindeer domestication is obscure, but since old Chinese writings mention the use of tame reindeer as early as 499 A.D., it is probable that the art originated in Asia some few centuries earlier. This would place its domestication much later than that of the ox, horse, etc., which suggests that the hunting of the wild species was for thousands of years the probable basis of life throughout its range. Wherever domesticated, reindeer are substituted for cattle; they are food, dairy, and transportation animals. Like the caribou, the reindeer is adapted to a cool climate and

⁴ E. Hahn, *Die Haustihere und ihre Beziehung zur Wirtschaft des Menschen, eine geographische Studie* (Leipzig, 1896).

in a wild state tends to shift northward in summer and south in winter. The domestication of the animal necessitates some concession to this habit, so that a seasonal migration of reindeer-breeding people, with their herds, is common. Also, if the herds are large, new pastures must be sought, encouraging a nomadic type of community life. As may be anticipated, reindeer breeders are non-agricultural and in that respect resemble hunters, but their life is more secure, and what is more, they accumulated wealth in herds, leading to the development of individual property rights and distinctions.⁵

The old civilizations of Europe and Asia laid great store upon cattle, sheep, goats, swine, and horses, all of which appear in Neolithic time. The domestication of the camel, elephant, and reindeer is probably of recent origin. In contemporary civilization, also, the flesh, skins, and wool of domestic animals are of great economic importance, dependence upon these by-products being relatively as great as among the hunters of reindeer. Further, we saw that hunting was specialized in certain areas according to the game animals present and to some extent domestication is similarly restricted. If we except civilized nations, such geographical segregation is clear; as, for example, the reindeer in Asiatic Russia, the llama in old Peru, the pig in Malaysia and the Islands of the Pacific; the elephant in southern Asia; dogs among the Eskimo. It is only among the advanced nations that we find a great variety of animals domesticated.

Geographers often point out that specialization in the domestication of herbivorous animals could have taken place only in open grasslands, plains, and tundras. The semi-arid lands of temperate and sub-tropical climates readily lent themselves to grazing, but the scant pasturage encouraged nomadism. Thick forest and the jungle have always impeded domestication and, consequently, as civilized nations expanded they cleared away the forests to make fields and pasture lands. Yet, one domestic food animal, the pig, can be maintained in the forest and the jungle. This accounts for the large place it holds in the eco-

⁵ Berthold Laufer, *The Reindeer and Its Domestication* (Memoirs, American Anthropological Association, vol. 4, no. 2, 91-147, 1917); Gudmund Hatt, *Notes on Reindeer Nomadism* (Memoirs, American Anthropological Association, vol. 6, no. 2, 75-133, 1919).

conomic life of Malaysia and Melanesia, but it is often overlooked that in the forest lands of Europe the pig was also the main support. His food was the acorn, beechnut, and chestnut, and tending the herds of swine, while they fattened in the forests, was a common occupation. The reader who recalls the opening pages of *Ivanhoe* will now understand better Scott's reason for selecting the scene. Even today the pig is the chief support of the peasant population in Central Europe, as was the case in the days of Julius Cæsar. Therefore the strong hold of the forest upon the folk-mind of Europe is based not merely upon a love of trees, but upon historic economic factors, in a not far distant time when the forest had a practical daily utility. To use modern nomenclature, there was a time when the tribes of the European forests possessed a pig culture.

We must not leave this subject, however, without reference to the fact that domesticated animals as a major economic factor are peculiar to the cultures of the Old World and also that one great asset lay in the use of milk. It was formerly believed that in its evolution civilization passed through three successive stages: hunting, pastoral, and agricultural. This belief is no longer tenable, but hunting is still regarded as the primitive form from which a tribe may pass directly to the domestication of animals or to agriculture. Perhaps what should be said is, that out of hunting came domestication and out of gathering wild plants came agriculture. So far, we have seen that even a primitive tribe uses both animal and plant foods, if they are obtainable, so there would be nothing improbable in believing that under favorable conditions a tribe may have developed domestication and agriculture simultaneously. Anyhow, the development of the two seems to have been contemporaneous in and about Asia Minor and Mesopotamia. We know, also, that milking cows was a well-established custom about 4000 B.C., and that later, in western and southern Asia, a large part of Africa, and all of Europe, either goats, cattle, horses, asses, or reindeer were milked. As food, milk and butter rank high, even according to modern standards; some African tribes made it their chief food, as did many of the pastoral peoples in western Asia.

WILD GRAINS

Even more than domestic animals, grains are valued by man. There is good ground for believing that cereals constitute the economic foundation to Mediterranean civilization, but we suspect that the domestication of grains followed the use of wild grains and seeds and in any case such primitive wild grain areas are known. Tropical countries, it is true, offer some plant substitutes for seeds, as the breadfruit, banana, potato, avocado, coconut, yam, cassava, etc. These are, for the most part, rich in starch and so are equivalent to seeds and grains. Wild rice grew in the Great Lakes region and was gathered by the Indian tribes residing there, the classic study of which is the memoir by Jenks,⁶ a work every student of primitive economics should read.

In our consideration of hunting peoples it was found easy to designate areas in which a single species of game was the dominant food, but in the case of wild seed foods there was less specialization. It is chiefly when plants are cultivated that intensive specialization is encountered, as we shall observe when that topic is considered. The only area in all of North and South America that may be said to specialize in wild plant food is California. The acorn, from which meal and then bread is made, tends to dominate, but the oak grows on the uplands and so is not always immediately accessible. Further, there is but one crop a year. On the other hand, the flora is rich in food plants. When considering population density, we found California to exceed that of every region north of Mexico, and Kroeber⁷ regards California as the most favorable area in North America for a people of simple culture, for the flora and the small fauna were abundant both in quantity and in variety, and though, like other primitive peoples, the tribes of California Indians tended to specialize in one or two local foods, if, for climatic reasons, one or both of these failed, a substitute was always at hand. Thus, the greater density of aboriginal popu-

⁶ Albert Ernest Jenks, *The Wild Rice Gatherers of the Upper Lakes. A Study in American Primitive Economics* (Nineteenth Annual Report, Bureau of American Ethnology, 1013-1137, Washington, 1900).

⁷ A. L. Kroeber, *Handbook of the Indians of California* (Bulletin 78, Bureau of American Ethnology, Washington, 1925).

lation in California is consistent with ecological conditions, and the chief uniformity in respect to vegetable food lies in that, where and when available, acorns were used, but grass and other seeds were specialized in according to localities, one of the more unique being the specialization of the Klamath Indians in the seeds of the water lily.⁸

East of California, in Nevada and Idaho, is a semi-arid area inhabited by a few tribes who also made large use of seeds and other wild foods. Both here and in California, special basketry beaters were made for bending the tops of seed-bearing grasses over carrying baskets and beating off the grains. The chaff was then winnowed in the usual fashion.

Conditions in many parts of Australia remind one of California in that the natives use almost every wild plant available. It is interesting to note, however, that where available, wild seeds are gathered, ground into flour and baked. In Africa, only the Bushman seem to have been hunters in the true sense, the other people making some pretense of agriculture. We are not, of course, concerned here with the plant foods playing a minor part in the economy of primitive peoples, but with non-agricultural areas in which some one or two wild plants were specialized in, making them staples. Cereals and similar grains are ground and then made into a bread. It is rather interesting to note that, wherever used, the prepared product takes this form. In the civilized world today some form of bread is the chief vegetable food of the masses, so we may take this food habit as almost universal, except in cases where the environment offers no materials from which a bread can be made. If grain-like seeds are not obtainable, substitutes are sought. Thus, in California, as just stated, bread is made of acorn meal; in the Amazon country of South America, the cassava root is used, and so on.

This brief summary of wild grains and substitutes is important as revealing the economic background to agriculture and the grain staples of the modern world. We may never be able to say just where and by whom each of the domestic grains

⁸ Frederick Vernon Coville, *Wokas, a Primitive Food of the Klamath Indians* (United States National Museum Report for 1902, 725-739, Washington, 1904).

was originally tamed, but it is a safe inference that each grain was first used extensively in its wild state.

THE GREAT CEREALS

Wheat, barley, oats, rye, rice, maize, and millet head the list of vegetable foods of the world. The first four, in some respects of one cereal type, were originally peculiar to people around the Mediterranean, where the yearly climatic cycle consists of a moderately dry summer and winter, with intervening humid seasons, to which order of events barley and wheat are especially adapted. Even today, in southern Europe, Egypt, and adjacent countries, wheat bread is the staple and olive oil takes the place of meat. Northern Europe is the home of rye and oats. It is essentially correct to say that from Neolithic times to date, the cultures of Europe and the Mediterranean have been economically based upon these four cereals, whose rich food content made possible dense and stable populations. Rice, another great cereal, developed in an Asiatic area, prevails in India and eastward, southern China, Japan, the Philippines, Java, and Sumatra. Here rice was and is just as basic as wheat and its relatives in the Occident. Maize is a New World cereal and the correlate of the aboriginal civilization in Mexico and the South American Andes. In the African Sudan the cereal was and is millet. In 1492, then, fully half of North and South America, four-fifths of Africa, three-quarters of Asia, were wholly dependent upon cultivated or wild substitutes for these great cereals. In Europe and Asia the exploitation of wheat, rice, etc., went hand in hand with the development of animal power, applied in the plow and the cart, thus making quantity production practicable and laying the basis for economic solidarity, the independence of ruling classes, and the maintenance of armies. The nature of rice and wheat favored such use of animal power, whereas maize and millet were best adapted to hoe culture; at least, the plow was not used for maize and millet.

The history of wheat is in many respects the history of Occidental civilization. Though there is still some difference of opinion as to the identity of the wild species from which it was

derived, the wild emmer found in Palestine by Aaronsohn in 1906 is generally considered one of the ancestral forms. Wild barley is known, however, from Asia Minor to Afghanistan. The origin of oats is not known, but they are believed to have been derived from wild grasses in Tartary, or in northern Europe. Rye also had a northern origin and seems to be the most recent of the cereals, having been first mentioned by the Romans. Turning to wheat as the most important cereal, we find that it first appears upon the scene in what is called the Fertile Crescent, a bow-like belt extending from the head of the Red Sea, up through Palestine to the headwaters of the Euphrates and the Tigris and thence downward to the head of the Persian Gulf. This bit of land, skirted by mountains above and by desert below, is the cradleland of Occidental civilization and somewhere within its borders the cultivation of wheat and barley was inaugurated. As suggested by the preceding section, the condition antecedent to the cultivation of cereals would be the use of wild grains by a hunting people. The domestication of animals may have intervened, but, so far, archæological data from this region give agriculture priority; in any case, the possession of wheat and meat, either wild or domesticated, would give strong support to national life, both physiologically and economically. It is from this area that wheat and barley spread northeastward into north China, northward into what is now Russia, and westward along the Mediterranean into Europe, Egypt, and North Africa. Where the climate was unfavorable, oats and millet were cultivated. Further, some historians consider the gradual spread of wheat culture up the valley of the Danube and thence over Europe, as the beginning of peasant life in Europe, supplementing pig culture and laying the foundation upon which the present order of life rests.

In much the same way as wheat and similar grains play the main rôle in the Mediterranean area, rice is the economic factor in eastern Asia. The production process for rice constitutes a series of steps, as complicated as for wheat. These are: (a), the necessary irrigation; (b), germinating the seed in water; (c), planting and finally transplanting entirely by hand; (d), weeding and guarding the crop from birds; and finally, to complete the cycle (e), harvesting and hulling the grain when

ripe. One difference between rice food and the cereals of the Occident is that rice is less often ground into flour; in many cases vegetable oil or animal fat is mixed with the boiled rice grains, thus replacing meat in the diet of hunting and herding peoples. As to where the cultivation of rice originated, definite knowledge is lacking, but wild forms are said to be common in India and eastward, and one variety is attributed to northern Australia. Rice is mentioned in early Greek writings and still earlier in Chinese, indicating its cultivation in southeastern Asia before 3000 B.C. In China it extended northward to approximately 32° North Latitude, above that line its place was taken by wheat, barley, and millet, as stated above. From the east it came into Babylonia and Syria, where it seems to have been important. Later, it found its way to Egypt, Greece, and as far westward as Spain, but seems never to have held an important place in the economics of these nations. Eastward the cultivation of rice extends into the Philippine Islands. It is a major food for all the Malay tribes in the East Indies; but, as we go eastward from Borneo, sago gradually displaces it, becoming universal in New Guinea.

To bring the history of rice up to date, it appears that the Malays carried it with them to Madagascar, whence it was introduced into South Carolina about 1700. Since that time its cultivation has been taken up in many parts of the world and production is increasing. Like wheat, it remains a human food and is not directly employed in the rearing of domestic animals.

We have now considered two great world grains, wheat and rice, but there is still a third, the maize of the New World. When Europeans reached these shores maize was grown from Chile in South America to the St. Lawrence in North America. Its distribution covered as large an area as could be claimed for either wheat or rice at that time. Another remarkable fact is that though several varieties of maize were known, these were practically the same throughout this wide range. Unlike wheat and rice, maize grows with heavy cane-like stalks and was cultivated in hills with a hoe. The wild ancestor of maize has not been fully agreed upon, but opinion favors the *teocentli*, a wild grass at present found in the highlands of Mexico, where the first domestication is assumed to have occurred. No doubt

this development sprang from a background of wild seed-eating cultures and the rise of maize as a food plant was coincident with the development of the aboriginal civilization found in Mexico and Peru by the Spanish conquerors. The English colonists in North America learned to grow maize from the Indians, with the result that this cereal has become of great importance in contemporary civilization, especially as food for domestic animals.

These are but rough general outlines of the great grain foods of man, sketched here to give some hint of what is meant by economic factors in culture and to show that even when we fix our attention upon a single primitive community, it also is like a world area in miniature, its existence dependent upon essential factors in its economic life. We have noted, also, the belief that a highly specialized and standardized grain food is a correlate of strongly federated tribes or nations in contrast to simpler independent communities. In sketching the evolution of grain culture and the domestication of animals, it was noted that these customs may well have originated among the gatherers of wild seeds and the hunters of large game, respectively. These initial steps may have been taken by primitive peoples, quite naturally, and in several places. On the other hand, a strong government, emerging from the primitive background, would appropriate the grains and animals of these primitive experimenters, taking the best and most serviceable. As good examples of this, we may note the adoption of maize and the potato by Europeans, the introduction of the banana into Africa, the spread of the soy bean from China, the introduction of the pig into Europe, etc., all of which emphasizes the significance of the economic factor in primitive, as well as in more civilized, communities.

PROPERTY AND WEALTH

Our point of view at the outset was that of a study of the primitive community. We have seen that the mode of life pursued by such communities, influences, if not the size of the community, at least the number of communities that can exist in a given area. Almost everywhere, also, the domestication

of animals and the raising of crops are accompanied by the sense of possession, for livestock, grains, and vegetables must be the property of someone. In contemporary thought there are two somewhat antagonistic conceptions of property, individual ownership and communism. Lewis H. Morgan, in his discussions of the evolution of society, assumed that all primitive groups were communistic and, in some respects, they seem to be so organized. Yet, all of them seem to distinguish between individual property and that of the community as a whole.

Among most hunting peoples game killed belongs to the hunter. In cases where he hunts alone this presents no difficulty because no one is present to dispute possession. On the other hand, in cooperative hunting, methods will be found in operation by which each hunter is given the animals he kills, his arrows having marks or individualities by which they can be identified; but, whatever the method, the right of the individual to what he strikes down is recognized. But we frequently meet with methods which automatically allocate some of the carcasses to chiefs, priests, and aged men, reminding us of how our forefathers supported ministers and school teachers. What is usually cited as communism is the so-called "law of hospitality," or the custom which requires that the individual who possesses food must divide it with the other members of the community who have none. This is not a negation of individual property, however, and hospitality need not extend beyond the limit of the community.

Those familiar with ethnographic literature know that even hunting communities often regard certain territories as their exclusive hunting grounds and force all outsiders to respect their rights. This custom was so well established among many Indian tribes of northeastern United States, that in deeding lands to the colonists, specific reservations were made for the continuation of these privileges. These tribes were usually composed of small bands, or camps, of relatives, and it has been shown, that the recognized tribal lands were sometimes divided into parcels, each permanently the property of a band. This amounts to ownership of the land, or at least of the game ranging over it, and is almost upon the level of the ownership

of individual property. In some other parts of North America, however, the tribal preserve is undivided and, in that sense, may be considered communal. Nor is it only among New World hunters that such property concepts prevail, for the Australian aborigines also regarded their rights of residence and exploitation as limited to definite localities.

Writing of certain eastern Indian tribes, Speck says:

The social units composing the band are the families, which consist of individuals related by descent and blood together with other women married to the men of the family. . . .

The matter, however, which constitutes the main bond of union and interest in these groups is the family hunting territory, in which all the male members share the right of hunting and fishing. These hunting "lots" or territories (*noki'-waki'* "hunting ground") are more or less fixed tracts of country whose boundaries are determined by certain rivers, ridges, lakes, or other natural landmarks, such as swamps and clumps of cedars or pines. Hunting outside of one's inherited territory was punishable occasionally by death. More often, however, trespass was punished by conjuring against the offender's life or health. Each family, as a rule, had some shaman in its ranks who could be called upon to work malefic influence upon a member of another family who was known to have intruded. In this way we can see how, in the community of old, a much involved system of cross-conjuring must have grown up, often, as the Indians themselves state, causing more or less of rivalry and feuds between certain families. Sickness in general came to be attributed to these sources, it is claimed. Permission, however, could be obtained by a man to hunt in another's territory. This happened frequently as an exchange of courtesies between families when the game supply of one or the other had become impoverished. These privileges were, nevertheless, only temporary, except in a few cases where they were obtained through marriage. It was customary, for instance, in case a family had a poor season on its own domain, for it to obtain a temporary grant of a certain lake or stream from its neighbour, so as to tide over until a better season. When it was necessary in travelling to pass through another family territory, permission was generally sought at the owner's headquarters before passing on, and if by necessity game had been killed to sustain life, the pelts were carried to the owners or delivered to them by some friend. This gave the pro-

prietors the right in the future to do the same in the territory of their trespassers. . . .

It is interesting to note that the large and attractive islands in Lake Timiskaming were common property, or more properly reserves, to be occupied and hunted on when the families came together in the spring for their social reunion. . . . Here the chief had a regular camp and many families would, upon occasion, camp around him, using the islands, which teemed with game, for their supplies while at the gathering. . . .

Economically these family territories were regulated in a very wise and interesting manner. The game was kept account of very closely, so that the proprietors knew about how abundant each kind of animal was, and hence could regulate the killing so as not to deplete the stock. Beaver were made the object of the most careful "farming," the numbers of occupants, old and young, to each "cabin" being kept count of. In certain districts, moose, or caribou, were protected during one year, in other districts the next year. The killing of game was regulated by each family according to its own rules.⁹

Respecting Australian customs we note that

Territorial rights among these peoples seem to be held in more reverence than do property rights in European culture, for throughout Australia, land is not only conceived of as belonging to man, but in addition, man is considered as having an inalienable connection with the land of his birth, and this is, in its greater aspect, the land of the local group. The local group, then, is the largest land-owning unit in Australian political organization and this is a feature which is universal upon the island continent as the writer has pointed out in another connection. The boundaries of the local group are well known to its members and they are very pugnacious in upholding their territorial rights against any outsiders who, without permission, might cross them in search of game. Trespassing, considered a serious offense, was the cause of a great proportion of the inter-local group fights.¹⁰

The domestication and herding of sheep, cattle, reindeer, etc., implies, as we have said, private ownership of the animals, but

⁹ F. G. Speck, *Family Hunting Territories and Social Life of Various Algonkian Bands of the Ottawa Valley* (Memoir 70, no. 8, Anthropological Series, Geological Survey, Canada, Ottawa, 1915), 3 ff.

¹⁰ Daniel Sutherland Davidson, *The Chronological Aspects of Certain Australian Social Institutions, as inferred from Geographical Distribution* (University of Pennsylvania, Philadelphia, 1928), 84.

as far as our information goes the most primitive herders do not claim individual ranges, but an equal share in the tribal domain. The tribe, of course, claims fairly definite territory. Yet, the long-established pastoral peoples of eastern Asia have more or less systematized grazing and headquarters rights, until in some cases these have become fixed and hereditary in families, thus approaching the level of individual ownership. In the important monograph of Jenks on wild rice, previously cited, it is made clear that individuals, usually women representing families, claim the right to particular sectors of marsh land where rice grows and that, if anyone should have seeded such a plot, it becomes the undisputed possession of the family. This suggests that even in the beginning of agriculture we may expect some approach to ownership in land, as we note in G. L. Wilson's account of agriculture among the Hidatsa Indians.¹¹ Among a number of tribes, however, the agricultural lands were tribal property and each spring plots were assigned the individual tillers who were usually women. For the season such plots seem to have been in the possession of the tiller, though as a tenant rather than a proprietor. But for the details of land ownership the reader should turn to the special works on the peoples concerned,¹² our present interest being met by noting that land holding develops even in hunting communities and that both individual and group ownership appear in all modes of life. It would not be correct, therefore, to say that primitive communities are wholly communistic, for they recognize both individual and group property, but differ greatly in the specific applications of these principles.

A peculiarity of the inheritance of property is the tendency among certain communities to draw sharp sex distinctions; the conventional property of women descends through females only, of men through males. For example, hunting lands and

¹¹ Gilbert Livingstone Wilson, *Agriculture of the Hidatsa Indians: an Indian Interpretation* (University of Minnesota, Studies in the Social Sciences, No. 9, Minneapolis, 1917).

¹² Adolf F. Bandelier, *On the Distribution and Tenure of Lands and the Customs with respect to Inheritance, among the Ancient Mexicans* (Reports, Peabody Museum of American Archaeology and Ethnology, vol. 2, no. 2, 385-448, 1878); F. G. Speck, *Family Hunting Territories and Social Life of Various Algonkian Bands of the Ottawa Valley* (Memoir 70, no. 8, Anthropological Series, Geological Survey, Ottawa, Canada, 1915).

the rights thereto, usually pass from father to son, or to other male relatives; agricultural plots, food, houses, etc., are usually the property of women and are inherited by their female relatives. Of course, the kind of property held by each sex may vary according to locality, but sex distinctions, once established, are clear cut and carefully observed.

With the accumulation of domestic herds and the produce of the fields, comes, in most cases, the recognition of individual distinctions based upon wealth. This, however, is not absent among hunting peoples who, as we have seen, may develop a complex system of land ownership and occasionally elaborate personal property and the ownership of social privileges. The non-agricultural New World area in which such a development is most conspicuous is the so-called salmon fishing area, among the tribes originally inhabiting a wide coast belt ranging from California to Alaska. Especially around Puget Sound do we find social stratification in tribal society, in the form of three levels, the aristocracy, middle class, and slaves.

We find, also, that wealth in chattels and in vested privileges of various kinds is transmitted by tribal systems of inheritance, such accumulations adding to the prestige and social standing of the individual. All this suggests that conceptions of property, whether individual or group property, may be found in any of the known economic types of community life.

Finally, note may be taken of less tangible forms of property, such as those we class under patents, copyrights, franchises, etc. These have some analogies among primitive peoples. Not infrequently charms and the rituals that may accompany them are regarded as the property of the originator and may be sold by him, thus becoming commercial commodities. Again, among some American tribes historical legends are regarded as the property of certain individuals, it then being their privilege to narrate them at public gatherings, in return for which they may receive presents of food and clothing. Their owners may sell or bequeath them at will. Songs may be composed and used by the composer only until he sells them to another, when they become the exclusive property of the purchaser. Many other peculiar social privileges are described in the literature.

TRANSPORTATION AND TRADE

The principle of exchange of commodities in its most elementary forms seems universal. It was the experience of European explorers that natives at first contact were ready to barter and understood the principles involved. Whether among such natives trade was limited to persons outside of their own community, is not clear, but in some instances one gets the impression that formal trade was wholly a matter of intertribal relations. However this may be, it is certain that intertribal trade was of considerable importance in remote times. Archaeologists have frequently called attention to the wide distribution of localized products, implying trade. For example, in the museum at Davenport, Iowa, may be seen a series of mortuary objects from a mound, which includes obsidian from the Rocky Mountains, copper from Lake Superior, mica from the Appalachians, and a large shell of a species the nearest range of which is the Gulf of Mexico. Similar evidences of transportation and trade have been noted in other parts of the world. Also when Europeans first began to trade with natives near the coasts of new countries, some tribes seized the opportunity to act as middlemen to the inland tribes. Most primitive peoples, however, were self-supporting until they came in contact with civilized commerce, but such contact, once made, new types of implements, clothing, etc., of such a nature as to preclude the possibility of the community engaging in their production, came into use, displacing home products. No doubt this was always true, but the contact of European traders was especially adapted to making natives dependent by introducing firearms and steel tools, neither of which they could produce for themselves. Thus, in a short time, stone and bone tools and bows became obsolete, and the native community was wholly dependent upon the European trader for its equipment.

We have linked trade and transportation because they are closely associated in contemporary thought, though the desire for transportation devices may have preceded trade. Even the simplest peoples found the transportation of their chattels troublesome; the Bushman of Africa, the Australian natives, the Tierra del Fuegians, etc., have few utensils and simple weapons,

but these must be carried on the backs of the natives themselves. Though it cannot be said with certainty, canoes may have been the first great achievement in transportation, but the domestication of cattle, horses, etc., gave equal facilities for land transport. No doubt the general history of domestication and transportation, down to present time, is well known to the reader; at least, there is abundant literature on the subject.¹³

ECONOMIC UNIFORMITY

A world survey of the economic basis to human life, such as we have but crudely sketched, impresses one, first of all, with the economic uniformity in group life. It is fairly comparable to the biological uniformity noted in the preceding chapter, for living man, if not constituting a single zoological species, is composed of a few very closely related sub-species. So far as can be observed, the main elements of human behavior are the same throughout and community life itself seems to follow a general pattern. In the study of group life, social anthropologists necessarily emphasize the observed differences between communities and ignore their similarities, but social science, in general, must give due regard to the uniformities in society. We have seen how similar are the feeding methods of mankind, that hunting takes a similar form wherever found, and that the securing of vegetable foods also shows considerable sameness throughout. Also, the division of responsibility between the sexes is strikingly similar. In a large measure the particular economic type followed by the community shapes the entire mode of life. This will become clearer when we take up the relation of tribal life to the geographical environment and review the culture area problem, since it appears that the geographical area tends to standardize tribal life, presumably because it commits the groups concerned to one economic type of subsistence. As we have stated repeatedly, the most basic of all economic conditions are those related to food, and the specific food habits of a people are among the most resistant to

¹³ Otis T. Mason, *Primitive Travel and Transportation* (United States National Museum Annual Report for 1894, 237-593, Washington, 1896); E. Hahn, *Die Haustierte und ihre Beziehung zur Wirtschaft des Menschen, eine geographische Studie* (Leipzig, 1896).

change. Aversions to certain possible foods are deeply rooted among all peoples, civilized or savage, and these prejudices for and against will tend to hold the community to its economic type. Uniformity in economic type is also one of the essentials in federating tribes and in maintaining nations; next to language, it is the one obligation enforced by conquest.

CHAPTER V

THE STUDY OF LANGUAGES

Speech is considered the outstanding human characteristic. No people have ever been discovered who were without a language, so we can say speech is a universal human trait. It is also a fundamental factor, because it is difficult to conceive of human community life without it. Speech is also the character that best distinguishes tribes; foreigners are those who speak differently and the distinction becomes automatic if the tribal tongues are so different as to be mutually unintelligible. On the other hand, the tendency is to regard those who speak one's language, or a near dialect of the same, as friends or brothers. Even primitive people have this tendency. What astonished European explorers in the New World was that every tribe seemed to have a language of its own and that few of these languages seemed to be like the others, or like any European tongue. The traders, settlers, and missionaries following the explorers found it necessary to learn these new languages. The missionaries, in particular, were forced to make an exhaustive study of the speech native to the community in which they labored. Many of them were moved to reduce these new languages to writing in Latin characters and then to translate the Bible and hymns into this tongue, but each native language so handled called for long exacting study. At the time America was discovered some of the best trained minds were in missionary service, and it was in large measure due to their scholarship that attention was directed to the study of primitive languages. When books and dictionaries in these languages began to circulate in Europe, they stimulated the comparative study of all languages. In the meantime European scholars were making observations upon the languages of Asia. There followed in the nineteenth century an interesting development of language study as a science which, because primitive languages

played a part in this development, has a direct bearing upon the rise of anthropology. In consequence, it seems worth our while to scan the history of linguistic science. Certain scholarly missionaries in the New World were the first to attack the problem of primitive linguistics. In this the Spanish Fathers led for a century, since by 1571 vocabularies of native tongues in Mexico were available. The Jesuits in the Great Lakes region of North America began about 1650 and a few years earlier Roger Williams prepared a "key" to the native languages of the New England tribes among whom he labored. The famous John Eliot published a grammar in 1666. One of the first, if not the first, comprehensive dictionary was compiled by Father Rasle. This was for the Abnaki, an Algonkian tribe in Maine, a work upon which he spent thirty years of scholarly labor, up to the time he was killed by New England soldiers in 1724. Fortunately, the manuscript was preserved. Early in 1700 a number of vocabularies were available, among them several from Algonkian-speaking tribes and the Huron of North America, and from native tribes in the West Indies, Mexico, Brazil, Peru, and Chile. These came into the hands of Adrian Reland of Utrecht, an Oriental scholar, who examined them carefully to see what relation they bore to Old World languages. In 1708 he published his results, declaring that he found no resemblances and expressing skepticism that such study would ever throw light on the origins of peoples for whom there was no history. Though too pessimistic in its conclusions, this work gives evidence of a scholarly interest in primitive languages. Further, though many missionaries had a practical objective in their labors, a few were fired with research zeal.

In general, the problems in this field appealed to the best intellects of the time. For example, about 1750 Maupertuis, a distinguished mathematician and astronomer, advocated the intensive study of languages as an approach to an understanding of human thought processes and attitudes. In America, Jonathan Edwards, son of the distinguished philosopher, was attracted to the study of New England languages in a scientific way and in 1789, published a pamphlet, the title of which is worthy of quotation in full: "Observations on the Language

of the Muhhekaneew (Mahican) Indians; in which the extent of that Language in North America is shewn; its genius is grammatically traced; some of its Peculiarities and some instances of analogy between that and the Hebrew, are pointed out." This treatise is notable as the first direct comparison of Indian languages in which relationships based upon structure were discovered, and further, because the author vaguely sensed the existence of language families, thus all but anticipating the findings that inaugurated the philological school in Europe. In passing, it may be noted that Thomas Jefferson wrote:

Were vocabularies formed of all the languages spoken in North and South America, with the inflections of their nouns and verbs, their principles of regimen and concord, it would furnish opportunities to those skilled in the languages of the Old World to compare them with these, and hence to construct the best evidence of the derivation of this part of the human race.¹

However, the great impetus to the study of languages came from Europe. The comparison of vocabularies for European and Asiatic languages revealed certain curious similarities and led to the discovery of the Indo-European family as distinct from others. Catherine II of Russia is credited with a hand in this discovery, but no matter to whom honor is due, it was the logical outcome of the scholarly interest in language that had been developing for more than a century. This discovery gave an insight, or a new lead in research: the conception that by empirical methods, and not by speculation, relationships between languages might be discovered. This made the study of language a science. So we find Schlegel in 1808 pleading for the classification of languages according to structure, William von Humboldt publishing on American tongues, and leading in the development of philology as a science. The history of this school, its triumphs and its failures, can be read elsewhere; what we need note here is that this new research lead placed the study of language upon a scientific basis, where it has remained to this day.

¹ Quoted by Samuel F. Haven, *Archæology of the United States, or, Sketches Historical and Bibliographical, of the Progress of Information and Opinion Respecting Vestiges of Antiquity in the United States* (Smithsonian Contributions to Knowledge, vol. 8, 1-168, Washington, 1856), 74.

The stimulus to American scholars was immediate. Duponceau, a Frenchman residing in Philadelphia, and Pickering, a native of Boston, were the leading spirits. The former first noted that the native languages of eastern Siberia were of the same type as North American languages and that both were different from those of the Pacific Islands. In 1816 the American Philosophical Society established a committee to promote research in the classification of Indian languages. From this time on, progress was slow but sure, Albert Gallatin making the first attempt to list North American tribes by linguistic families in 1823.

The close of the American Civil War marked the beginning of a new era in the scientific study of languages as well as in anthropology in general, the outstanding leader being J. W. Powell, who organized the United States Geological Survey and later the Bureau of Ethnology. However, we are most interested in his inauguration of a linguistic survey of the Indian tribes of the United States and Canada. This was carried to completion before his death and a list of families, together with a linguistic map, was published. In this work he was the organizer and leader, associating with himself many men destined to become distinguished in anthropology, among whom was the linguist, Albert S. Gatschet. This survey and the identification of stocks was preliminary to the more serious study of these languages, in which a number of anthropologists have been engaged from that day to this, recording phonetically in the form of texts, samples of language as spoken, from which it is possible to construct the grammar.

The study of primitive languages in other parts of the world, though not prosecuted with such vigor as in America, has nevertheless progressed, and promises to receive more and more attention in the near future. We have sketched the history of linguistics because in that way one may comprehend the part the study of languages has played in the development of our subject. The discovery of families gave an insight, an objective approach to the phenomena. That this was a true insight is clear, because the foundation laid by these earlier researches has never been essentially modified. Naturally, in the begin-

ning, it was believed that this new method of approach would recover the history of mankind and explain his origin. Every new insight into the human problem has raised great expectations scarcely to be realized, but if a true insight, something important will be gained. In any case, language is still the most objective and satisfactory basis for classifying human communities and it is in that sense that this development is important to social science.

CLASSIFICATION OF LANGUAGES

With the discovery that languages could be classified according to their inherent objective characters, came a new impetus to the survey and classification of the world's peoples. The problem was to examine each language, compare it with known types, and in this way determine if it belonged to a known family, or constituted a new one. By the close of the eighteenth century, most of the languages of the world had been examined and identified according to family. We can, therefore, make an inventory of language as a world phenomenon. We cannot be exact as to the absolute number of families so far identified, because there is still difference of opinion as to the status of a number of families, some investigators claiming that some few of the accepted families are really members of one family, etc. Yet, we can approximate the true number, in the accompanying list.

Australia, 1; Oceania, 1; Africa, 6; Asia and Europe, 21; South America, 75; North America, 75. Total, 179.

Future research promises to add a number of new families in the island of New Guinea and the Sudan of Africa, but these additions are likely to be offset by the elimination of an almost equal number of established stocks, so a good guess would be that there are, according to the classification now used, about two hundred families of languages spoken in the world today. How many families once existed, but are now extinct, we have no means of knowing.

In this scheme of classification, however, a family is a group of related languages. This relationship is based upon similari-

ties in word and structure. Most of the languages of Europe, including English, belong to a single family, called the Indo-European linguistic family. The degrees of difference between the languages comprised in such a family vary greatly; as from mutually unintelligible English and Russian to such small differences as between English in Alabama and New Hampshire. It is a common practice to speak of tongues as languages when they have vocabularies and idioms so different as to require special study to know them, while those which are sufficiently similar to permit easy mutual understanding by persons speaking properly only one, are known as dialects. It is difficult, however, to draw the line in many cases, but this is of no great moment, because the important problem in classifying the languages of a linguistic family is to arrange them according to their genetic relations to each other, a subject that still engages the students of the Indo-European family of languages, to which our own speech belongs.

CONCEPT OF A LINGUISTIC FAMILY

While there is some difference of opinion as to the nature of a linguistic family, the term is used by all to express a degree of resemblance between the languages spoken by two or more communities. As we have stated, these languages are dealt with empirically, which means in this case that these resemblances are discovered by observation upon the languages themselves. The experience of linguistic students is that when two languages are closely similar, a vocabulary of fifty or more common words taken at random will reveal this likeness. That is why the first visitors to a primitive people usually attempted to record a brief vocabulary. This principle may be illustrated in the following list of words, from the published dictionaries for three tribes of North American Indians: the Santee Sioux, Biloxi Sioux, and the Klamath. If dictionaries of these or other Indian languages are available, the reader can make further comparisons.

COMPARATIVE WORD LISTS

<i>English</i>	<i>Santee Sioux</i>	<i>Biloxi Sioux</i>	<i>Klamath</i>
one	wangzi	song sa	nash
two	nongpa	nongpa	lapi
I	miye	ngk	nu (ni)
head	pa	pa	nush
hand	nape	tcak	nepaga
eye	wicista	tut cung	lulp
man	wicasta	ang ya	maklaks
woman	wing yang	ang xti	shnawedsh
house	tipi	ti	tchish
fire	peta	peti	luloks
dog	sung ka	tcungki	watchaga
deer	tahinca	ta	shuai
buffalo	tatanka	yinisa	yuho
blue	to	tohi	matchmatchli
to kill	kte (teya)	te	shiuga
to run	ingyangka	tang	hudsha
to speak	ya (oyaka)	e	shapa
many	ota	tahi	tumi
large	tanka	tang	muni
small	cistingna	miska (yingki)	kitchkani

In the accepted linguistic classification, the Santee and the Biloxi are placed in the Siouan family along with a number of other tribes. The Klamath, on the other hand, belong to a different family. Even without this information, the reader would regard the Santee and Biloxi as similar in contrast to the third. It is also clear that these Indian languages are very different from English, so the table presents comparative word lists from three linguistic families. In the main, languages can be satisfactorily grouped in families by comparing words, grammatical structure, and phonetics, because, for obvious reasons, the speech of a community must be highly systematized, so that a small sample text from each will show about as much agreement as a large collection. Yet, now and then, languages will be found with occasional and vague similarities, that hint of relationships which are not sufficiently pronounced to warrant both being placed under the same family name. When such similarities are discovered, they lead to controversies over

re-classification. However, we are now concerned with the significances of the classification, recognizing that all kinds of classifications are in part arbitrary.

The basic assumption is that languages showing marked similarities must have had a common linguistic origin. In terms of community life, this would mean that a group of people somewhere standardized a language and that as its numbers grew, new communities were formed by division of the parent bodies. In time, differences arose in the speech of these related communities, which became great or small according to circumstances. All these languages would then be related by origin, or descent. The term "linguistic family" expresses such a genetic relationship. Some linguists prefer the term "stock" to "family," feeling that the latter unduly commits one to the genetic idea, but in the main, it is agreed that decisive similarities in languages can only mean that they had a common origin.

This at once brings to the fore the question as to how languages change. In the first place, speech uniformity within the community is a necessity, for unless one person can communicate with another in precise and unmistakable terms, the social life of the group is handicapped, because cooperation and teamwork of the human type require exactness and ready communication. On the other hand, the need for uniformity between two or more groups is far less, if in fact there is such a need at all. Also, the highly standardized speech of the single community need not be stable; all that is required is that it change so slowly that the necessary uniformity is preserved. This subject of language change is of great significance to genetic relationships, yet little that is positive is known about it. It is clear that many languages are of a respectable age and that members of families whose separation must have taken place long ago, have not changed fundamentally. On the other hand, the great number of languages in the world seems inconsistent with the idea that change is exceedingly slow. These contradictory characteristics of languages have puzzled anthropologists for a long time, so we may pass over them without further comment. However, the history of Old World languages and the comparative studies of certain primitive tongues gives

some information as to how changes occur. For one, the community separating from the parent body may move into a new locality, and meeting new objects and new scenes will add new names to its vocabulary. Old terms may also become associated with new meanings. Thus, in course of time, should these communities renew their contact, some difficulty would be experienced in conversation. On the other hand, such words as apply to the person or to strictly social relations appear more stable, as pronouns, numerals, names for parts of the body, etc. It is usually with such terms that linguists explore languages to classify them.

Again, two languages may be very much alike, except with respect to the use of certain of the elementary sounds. We have said that languages were the most highly systematized of human social traits. This is especially true of their phonetics, so we may expect that if a change is made in a sound, it will apply to every word in which that sound occurs. Students of European languages are familiar with Grimm's Law which attempts to define the phonetic shifts between certain tongues of the European family. Thus, *p* and *f* may interchange, also, *d* and *t*, as *pater*, father; *ped*, foot; *Tochter*, daughter. Another example of such change is observed in Siouan Indian languages, as between two divisions:

<i>English</i>	<i>Yankton</i>	<i>Teton</i>
Dakota	dakota	lakota
very	nina	lila
go home	hda	kda

It is believed by some that there are tendencies in phonetic shifts which, if discovered, would show relationships between many languages now regarded as wholly unlike. At least, we see evidence for phonetic change and substitution, which could bring about marked dissimilarities between languages previously identical.

While a full discussion of this subject belongs to a special treatise on linguistics, we may note one additional method of change. A community may come to live in close contact with another speaking an unrelated language and borrow some of the new vocabulary as well as certain grammatical forms.

These accretions may become eventually so welded with the original speech as to be unrecognizable as foreign. Even the phonetics of the language may change in this way. Many Old World languages have enriched their vocabularies and their structure by such borrowing. English, for example, has drawn largely upon Latin and many Indian words have been added to American speech, as, wigwam, tipi, squaw, tomahawk, hominy, succotash, totem, etc. That borrowing does occur even among primitive peoples, is suggested by vague but clearly noticeable resemblances among the languages in a large geographical area. Examples of this are known in America, as among the Indian tribes of Southeastern United States and those of California. Of course, such borrowing gives no information as to the origin of the particular languages involved, but it may throw some light upon the history of the groups speaking them, because to borrow successfully from one another they must have lived, for a time, in close contact. As we shall see, eventually the tribes living in one geographical area will have numerous common interests and resemble each other in many other ways. There is nothing unusual, then, in their speech coming to have something in common.

In conclusion, it appears that the concept of a linguistic stock, or family, is a group of languages evolved from a parent language. The classification, therefore, expresses genetic relationship. Within a large family the tribal languages may fall into sub-families and into dialects, the relation being not unlike that expressed in a genealogical chart, or tree, and the analogy to a tree expresses very well the way in which languages develop.

The distinction between what is a family relationship and what is not is usually expressed in this way: if two or more languages resemble one another in more points than can be attributed to chance, then they belong to the same family. There is nothing wrong with this definition, but to determine what are the chances that any given amount of difference will occur more than once, calls for a more exact treatment of languages than seems possible. In practice, classifications are conservative, recognizing relationship only where consistent simi-

larities run throughout. Theoretically, it is assumed that all languages are related, that what we regard as families are derived from parent families, etc. But so far, no safe empirical method of grouping them has been discovered. It is true that every now and then certain similarities between existing families are pointed out and in some instances these have led to re-classification, but the final systematization of relationships is a problem of the future.

WRITING

As seen in historical perspective, man has steadily struggled to surmount the limitations space and time place upon communication. Once language was achieved, he could reach all his fellows within hearing distance, but he also developed signaling and objective signs for covering greater distance and eventually some of the more fortunate groups reached the writing level. What we have in mind are methods by which the spoken word can be recorded. The history of alphabetic and other forms of writing is fully discussed in the books upon the subject and a brief résumé of these may be found in any good encyclopedia. This systematic account of writing forms one of the most important chapters in the social life of the human race. Further, once writing was effective, it tended to standardize the language used and also to extend that language by displacing other forms of speech. Probably one reason for the apparent constant change in the speech of primitive communities was the lack of written standards and the small number of people using the language. In a small compact group without written standards, it seems possible for changes to be rapid and even radical. These relations between writing and the stability of language are, however, things about which little is certainly known, but our interest is in taking note of the influence writing seemed to have upon the federation of communities and the accumulation of more and more exact knowledge. It belongs rather to the advanced nations than to primitive communities, although the languages which are expressed in writing took their form among the primitives. While to us writing seems

indispensable, it is conceivable that all civilization could break down and writing be forgotten, but so long as man survived it is scarcely conceivable that there be no speech.

SIZE OF VOCABULARIES

It is frequently assumed that the more complex the civilization the greater will be the number of words in the language. There is some truth in this. A primitive community or even a tribe of twelve hundred people, about one half of whom are immature, can scarcely be expected to maintain a vocabulary equal to that of present-day England; on the other hand, it would not be safe to rate the social status of a people by the size of their vocabulary. There is, probably, as in population, an optimum number of words necessary to the normal functioning of a tribe in a given place and time, but no one has studied the subject intensely enough to venture even a guess as to the locus of that number. We may expect, also, that there is a minimum below which the primitive community cannot go. This, also, remains undetermined. Some of the simplest peoples known to Europeans were the Tasmanians, the Andaman Islanders, and the Tierra del Fuegians. Their languages are not very well known, but the Ona of Tierra del Fuego are credited with four thousand words and the Yahgan with several times as many. Kroeber² lists the following approximate estimates for the number of words in the languages of other primitive peoples as obtained from published dictionaries:

Klamath, North America	7,000
Navajo, North America	11,000
Dakota, North America	19,000
Zulu, Africa	17,000
Maya, Mexico	20,000
Nahuatl, Mexico	27,000
English (Webster)	130,000

These estimates are not wholly comparable with one another, for what is a word in one language may be a phrase in another, nor can we tell to what degree each of these dictionaries exhausts the actual languages. Still these statistics serve to indi-

² A. L. Kroeber, *Anthropology* (New York, 1923), 116.

cate the range of words. They also, in a rough way, suggest that there may be a tendency for the number of words to increase with the size and complexity of the political unit or nation. As to the minimum number of words for a human community, the tabulation suggests several thousand. The Klamath Indians, for example, are a small tribe of simple culture and yet credited with seven thousand words.

The next question suggesting itself is whether each adult in the group knew all these words. Students of education have been interested in discovering how many words the average American citizen knows, and these estimates range around ten thousand words. While it is certain that a community of a hundred adult men and as many women will collectively use more words than any of these persons taken separately, the differences between individuals may not be great. Having no writing and a much simpler type of life than civilized peoples, one may doubt that the personal differences in vocabulary will rise to the same level as among us, but it would be worth while to make some observation upon the members of such a primitive group, to check this assumption. For example, the population of the Klamath, at the time their dictionary was compiled, was estimated at eight hundred. The seven thousand or more words credited to them would thus have been carried by about four hundred adults. The other peoples listed in the tabulation were more numerous, and, in general, the tendency suggested is for the number of words to increase with the population. However, this should be accepted in a general way only; at least not until carefully checked. We can draw the conclusion that several thousand words are the probable minimum for a primitive community.

THE SOCIAL ASPECT OF LANGUAGE

Many things can be said about the social aspect of speech, most of which are obvious, such as that speech is a convenient means of communication, a formulator and carrier of folk beliefs, etc. There is, however, one necessary characteristic of speech that deserves passing attention. Every educated person has realized how formal and rigid are the grammatical and

phonetic forms in his own speech, but at the same time how flexible these are with respect to changing experience. Within a century, English-speaking peoples have passed through a series of striking changes in economic and social life, stores of new technical knowledge are communicated and many new social situations created, yet these have all been satisfactorily handled without changes in speech, except for the addition of a few words to the dictionary and the introduction of new idioms. The procedures with respect to pronouns, verbs, subject, object, number, etc., remain the same. The question is sometimes asked whether a primitive language could be used by a civilized people. There is much difference of opinion upon this point, but those students most intimately acquainted with primitive languages see them quite capable of modern use, provided, of course, their vocabularies are enlarged. In every case, the structure of the language seems adapted to the expression of the finest relation between ideas and observations of external relations in the surrounding objects. From one point of view, speech is a symbolic system for communicating information and for creating a state of mind in another person. The imparting of information is fundamental and speech is necessary to the cooperation we see in human group life, but we should not overlook the function of speech in influencing the minds of others. Cynically minded persons are fond of saying that speech serves to conceal truth rather than to convey it, and most people have heard the remark attributed to Mark Twain, that "one inalienable right of man is to think one thing and say another." In the most primitive groups of which we have knowledge, we note individuals using speech to implant in the minds of others, fear, respect, etc., rather than attempting to convey the entire truth. The old assume this attitude toward the younger generation, parents toward children, men toward women, etc. This is not to say that all is deceit, it is not; truth is prized and valued everywhere, but men seek to influence their fellows by speech more often than by blows. How large a rôle this plays in community life, cannot be accurately stated, but we are ourselves familiar with the process.

In concluding this brief note on speech as a social phe-

nomenon, we call attention to its basic character, a rigid system of arbitrary symbols, readily adaptable to almost any form of society. We need not expect, therefore, any important changes in human speech correlated with economic or social changes. Hence, the anthropological problems of language may be expected to stand somewhat apart from those of economic and social affairs. Finally, we have called attention to the function of speech in influencing the minds of others, in standardizing belief and action, and in enhancing leadership and community control.

CHAPTER VI

THE ARCHÆOLOGICAL PROBLEM

Modern Europeans are interested in the prehistory of man. Buried cities and extinct races fascinate everyone. This may be due in part to the large place history holds in the school curriculum, which subject not only recounts the great deeds of national heroes, but leads us to venerate the places and objects associated with them. The Bible, the most widely read book among European nations, turns the thoughts of its readers toward the Holy Land and Egypt, where ruins and other relics of the past abound. Further, there is reason to believe that all races venerate the past, or at least possess some curiosity as to their ancestors and their deeds. Reverence for the dead and ancestor worship are probably parts of a complex of beliefs and interests common to all members of the human race. It is not strange then that history is an appealing subject, nor that European scholars are moved to carry history back to remote times. The method of recovering history is to seek still more ancient written records and inscriptions; when writing fails, history, in the usual sense, ceases. Search in the tombs and buried cities of the Old World often brings to light new inscriptions and occasional documents by which they can be dated and since the associated objects, such as pottery, jewelry, costumes, etc., are also of the same age, these can then be taken as time markers for other cities where no inscriptions are found. This search for tombs and buried cities and their dating by objects discovered therein, is usually spoken of as archæology.

One important method in anthropology is the archæological approach to man's origin and early career, but it is usual to distinguish, on the one hand, the study of buried cities in Egypt, Asia Minor, Greece, and Rome, and such antiquities as the mounds of the Ohio Valley and the houses of the Cliff Dwellers in Colorado, on the other. In the former case, the historian works backward from inscriptions and dates, ceasing

when he cannot associate his finds with historic time; the latter, however, are approached from the anthropological point of view, the problem being to relate one type of ruin or artifact to another in a succession of time, without dates or even connecting links with historic time. Ultimately, however, anthropology expects to reveal the main outline of man's career, backward from the point where history fails. The term, classical archæology, is frequently used to designate researches projected from the historical horizons of the Old World, and the term, prehistoric archæology, to denote the analogous investigations carried on by the anthropologists. So we are now to consider another important lead, a method of approach in the study of man, the objective of which is to determine the time sequences in archæological remains. As we have said, history gives dates for buildings, monuments, and events, but, for large areas of the world, such history begins with the descriptions of the newly discovered lands and peoples by European explorers. The history of America begins with Columbus in 1492. Even in the Mediterranean countries and in China, history does not become adequate until after 3000 B.C., and, even then, must be supplemented by archæological investigations. Anthropology, however, leaves to history and classical archæology the immediate prehistory of the old civilizations of Europe and Asia and concerns itself with the areas of the world without history and with the early stages of human existence in every part of the world. The fundamental question archæology asks whenever stone implements, pottery, ruins of buildings, etc., are found is, which one is older than the other. Since no dates are available, the archæologist can do little more than arrange the objects he finds in a time sequence. It was the discovery that such sequences could be worked out objectively and repeatedly verified that gave the first lead to such investigations and thus made archæology a science. That the early history of man could be recovered in this way, stirred the imagination of scholars, and subsequent events leave no reason to doubt but that eventually the whole outline of man's career upon the earth will be known. Many details may be lacking and gaps in the record may never be completely bridged, but that the main sequences will be fully known seems certain.

The first real insight into the problem and the method of approach is attributed to Danish scholars working under the leadership of Thomsen (1816-1865). Thomsen first established the successive ages of Stone, Bronze, and Iron, as observed in Denmark. His method was empirical. For many years prior to his birth, the Danes used peat for fuel, and, as the peat was cut from its bed, occasional stones, pottery, copper, bronze, and iron objects were found. Since it was known that peat is formed in swamps or bogs, these objects must have been dropped or thrown into the mire by the people using them. Also, the coast of Denmark abounded in great heaps of shells, bone, and other refuse that were clearly the work of man. These are called kitchen middens. When excavated, these middens also yielded objects similar to those found in peat. Finally, scattered over the land were tombs and graves of the ancients from which the same types of artifacts were recovered. Large collections of these objects were gathered into the museums of Denmark and careful notes taken of where they were found. Thomsen, after patiently studying these data and materials, observed that certain types of objects were usually associated with stone implements, others with bronze, and still others with iron. Further, the conditions under which these objects were found led him to believe that successive culture periods were represented. Therefore, he proposed a culture sequence for Northern Europe, as, Stone Age, Bronze Age, and Iron Age. However, the Stone Age of Denmark was, as we shall see, characterized by polished stone implements, differing in that respect from the Stone Age in France and England, where many unpolished implements were found. With this in mind, Sir John Lubbock, an able English scholar, proposed a division of the Stone Age into palæolithic and neolithic, thus giving four successive culture periods, instead of three. These discoveries of Thomsen, and particularly the clear and forceful writings of Sir John Lubbock, tended to crystallize the conception that by detailed study of archæological remains and by exact observation, not only could the order of succession in man's achievements be discovered, but new cultures and new races could be brought to light.

STRATIGRAPHY

One idea upon which archæological method is based, is that when objects are found in undisturbed layers, the oldest are at the bottom and the latest at the top. Great differences in time, such as are encountered in Europe, Egypt, etc., will be represented by clearly marked layers, or strata. In its most general form, this idea of superimposed strata is older than anthropology, for in the history of geological science, the notion took shape early. We have noted that among historians, the conception of buried cities is old, but the insight into successive horizons, specific and universal, in the archæology of man, naturally did not come until there had accumulated a store of materials and a body of experience with the phenomena observable.

It now seems strange to us that until recent years, European peoples failed to see the hand of man in the stone implements gathered from their fields, but regarded them as having fallen from the sky, or as "thunder stones." Particularly were chipped implements so regarded, and it was not until about 1860 that these were accepted by scholars as the work of man. But even so, these remained peculiar and puzzling objects, unrelated in time, until the work of Thomsen and his followers demonstrated that the key to the problem lay in stratigraphy.

Perhaps a clearer idea of what constitutes archæological research may be achieved if we follow the archæologist in our imagination, or better yet, picture to ourselves how the archæology of contemporary culture might be studied. For one, the archæologist seeks refuse heaps and graves. The latter are important for two reasons, for the skeletons which tell us the kind of people buried there, and for the objects placed with the dead, which tell us something about their mode of life as well. How refuse heaps lend themselves to archæological research may need a demonstration to be fully understood. Let us think back to the not far distant past, when the settlers were reclaiming the Ohio Valley. A family moved out into the virgin forest, made a clearing, and erected a log cabin. The ashes from the hearth were dumped in some convenient place and this spot may for years have continued to be the favorite

refuse deposit. Occasionally a button, a broken fork, a bit of china, etc., found its way there, and from year to year the heap grew. If this continued for a time, say three generations, and an archæologist dug a trench through the heap, noting what was found from the bottom to the top, he would then be in a position to describe the changes in mode of life among the successive families. In the absence of documentary data, it might be possible to approximate the date when the cabin was erected, provided the dates for the ever-changing styles of buttons, china, etc., are known. An occasional coin might also be of assistance.

So far, we have spoken in terms of a modern family, but since we have seen how primitive man was prone to live in camps, we may expect that under relatively stable conditions such a primitive camp would likewise accumulate a refuse heap. Archæologists working among the ruined cities of western Asia and Egypt often find immense dumps of refuse, which when studied in this way give a clear outline of sequence in art styles and inventions. In New Mexico and Arizona are also many old ruined houses and cliff-dwellings, near which may be found great heaps of ashes, broken pottery, etc., from which definite ideas of sequence can be had. Then, we may be reminded that what we know of man in the European cave period is derived wholly from careful studies of the refuse heaps in and about the open mouths of caves.

We shall see later that a well-developed style of implement or of pottery tends to spread over a section of the earth's surface, to be displaced later by a new style, spreading in the same way. If the sequence of these styles can be determined by finding one certainly superimposed on the other, then camp or village sites, when found in that area, can be related in time according to the presence of these styles. Pottery is by far the best material for this purpose; its fragments are almost indestructible and even successive slight changes in design, form, or color, can be observed. Yet, it is the spreading character of these styles that makes the archæological method effective, for, though cases of true stratification are rare, a sequence, once established, tends to hold good for a considerable area. True stratification occurs where a camp or village site is occu-

pied for a long interval and then abandoned until a new people come into the country. During the time when the place was unoccupied, soil would accumulate to an appreciable depth on the débris of the previous occupation; then, if people came to live on the spot again, the débris of their camp would be separated from that of the first occupation by a sterile layer. If the site is the mouth of a cave, or a shelter beside a projecting wall of rock, the cavity will be gradually filled with camp refuse, a layer for each period of occupation; but unless the character of the place is such as to induce every people tarrying in the vicinity to camp upon it, there will be no accumulation of refuse and no stratigraphy. Thus, it may happen that but two or three places in a river valley, or even in a much wider stretch of country, will have been occupied long enough at any one time to reveal the character of life during that period; further, if the camps have been in the open and the site swept by winds and rain, everything will be carried away. Towns and cities are likely to be built upon advantageous sites and to be occupied necessarily for long periods, thus affording every opportunity for archæological study, but the simple folk live in caves, rock-shelters, or a camp on the shore where shellfish may be caught, where they leave behind accumulations that are susceptible to stratigraphic treatment. Hence, relatively speaking, stratified sites are rare and should be carefully guarded until a competent archæologist is ready to undertake their excavation, because they are the keys to the culture chronology of the region. However, the archæologist is not dependent upon visible bands or strata in such deposits, for occupation may have been continuous over great stretches of time and the bulk of the débris may be the same from top to bottom, for example, wood ash, bones, and sweepings from the hearth. What the archæologist does under such circumstances is to make artificial strata by horizontal lines, at regular intervals, and then keep a record of what was found at each level. This is the method used in Southwestern United States in working the ash heaps accompanying ruins of the Pueblo and other periods. The successive positions of pottery fragments in such a heap will give the time order for the appearance of the several styles of pottery. For example, the archæologist, N. C. Nelson, investigating ruins in

New Mexico, found by this method that at least five types¹ of pottery succeeded each other in the largest, or oldest, refuse deposit. His table is as follows:

TYPE NO.	CHARACTER OF POTTERY
5	Modern ware: black-on-pink and black-and-red-on-pink.
4	Historic Two-color Glazed Ware: brown or green on either gray, red, or yellow.
3	Three-color Glazed and Painted Ware: black-glaze-and-red-paint on either gray, yellow, pink or red.
2	Two-color Glazed Ware: black or brown-on-red, yellow, or gray.
1	Two and Three-color Painted Wares: black-on-white or red and black-and-white on red.

In this table, No. 1 is the first or oldest type and the most recent is No. 5. As we have said, the heap of ashes and refuse was taken off in successive layers; in this case there were ten layers one foot thick and each 3 by 6 feet on the horizontal. Then the number of fragments of each type found in each one foot layer was ascertained, and their comparison made clear that these five pottery styles appeared at this ruin in the order indicated, each style having one level at which it predominated.

TIME RELATIONS

The foregoing gives sequence in time only and does not give definite evidence as to age in years. If, as in Southwestern United States, extinct cultures can be connected with the living, then some notion can be formed of the extent of time represented, but it is not always possible to join extinct and living cultures in this way. In Western Europe, it has been profitable to correlate culture strata with geological and climatic changes. In Denmark, where the first important contribution to archæology was made, a study of the various peat bogs revealed several changes in the kind of trees furnishing the materials for the peat deposits, these changes suggesting fluctuations in climate. On the archæological side, it was observed that certain artifacts were usually associated with one type of peat only.

¹ N. C. Nelson, "Chronology of the Tano Ruins, New Mexico" (*American Anthropologist*, n. s. vol. 18, 159-180, 1916), 178.

Since the time relations of these specimens of trees could be determined independently by their positions in peat deposits, they served not only as a check upon archæological sequence, but to correlate archæological data with climatic and geological changes.

The cave deposits of France, containing débris from the campfires of hunters, show clearly that they were formed at a time when many animals, now extinct, lived in that part of the world. Also, it is known that northern and central Europe were formerly subject to periods of glaciation, alternating with warmer periods, and archæologists have been able to correlate their strata with these periods. In this way, man's appearance in a given region and the successive phases of his history can be stated in terms of the geological record.

THE PALÆOLITHIC PERIOD

The reader wishing a detailed example of archæological research should turn to the literature for Western Europe, particularly the caves of France and Spain. By use of the stratigraphic method, the succession of periods given in the table has been determined. Not all of these were found in a single deposit, but the sequence was arrived at by finding now two or now three in one cave or shelter, a few in another, etc., the overlapping of the superpositions enabling archæologists to assemble all the different strata in one series. No pottery was found in Palæolithic sites, but the strata could be distinguished by the types of chipped implements, the use of bone, and incised and painted ornamentation. Finally, after the series and order of successive culture periods had been established, a cave known as Castillo was discovered in Spain, in which practically all the known periods were found in place. This may be regarded as the final check upon the results of cave exploration in France, but even without it, there was no reason to doubt the results. The determination of this sequential series may be regarded as the outstanding achievement of the archæological method. The accompanying table for the Palæolithic period gives the main divisions and a few of their distinguishing characteristics, as established by French archæologists. For a full account the

reader is referred to the special treatises on the subject. We have given here the main periods in sequence as determined by the stratigraphic method. Most of these periods, however, are themselves divided into three or more subdivisions, suggesting a more even gradation than our table indicates. On the other hand, during this entire sequence the following traits are absent: pottery, the bow and arrow, polished stone, domestication of animals, and agriculture.

PALÆOLITHIC SEQUENCE OF CULTURE

8. Azilian—A puzzling period because of an apparent decline in palæolithic culture.
7. Magdalenian—Chipping declines and bone points come in. Atlatls, harpoons of bone and horn, masks, polychrome painting with some composition, incising of bone, etc.
6. Solutrean—Whole surface of flake finely chipped. High state of the chipping art. Needles with eyes.
5. Aurignacian—Flake chipped on edge with some surface chipping. Use of beads, carving in stone and bone. Painting in monotonous.
4. Mousterian—Flake used with rudely chipped edges. Burial with mortuary offerings. Hafting of stone tools.
3. Acheulean—A definite form of hand ax, tools chipped on both sides. Use of fire certain.
2. Chellean—More defined forms of chipping. Probable use of fire.
1. Pre-Chellean—Crude chipping of flint nodules.

As previously stated, Thomsen in Denmark noted three horizons in Scandinavian archæology, Neolithic, Bronze, and Iron. Following this lead, the Neolithic, or polished stone period, was found to follow the Palæolithic period just noted. For Scandinavia, at least, the Neolithic period comprises three sequences as follows:

3. Stone Grave Culture—Tombs of stone with chambers, highly developed pottery and stone tools.
2. Polished Stone Ax Culture—Two types of ax, pointed and hatchet-shaped; pottery, chipped knives, etc.
1. Kitchen Middens—Crude pottery, chipped stone tools, bone work, etc.

While certain local developments appear in these Scandinavian cultures, they represent roughly the successive Neolithic cultures for all of Europe. Following the Neolithic was the Age of Bronze, which in Europe passed through four or more stages, beginning with the use of copper and ending with highly developed swords and ornaments in bronze. Finally, the Bronze Age passes gradually into the Age of Iron, which period in turn is subdivided into a number of epochs, leading into the historic period of European culture about the opening of the Christian Era.

Thus, we can say that the outline of man's career in Europe is in hand. Classical archæology has given us similar outlines for the civilizations in the valley of the Nile, in Crete, and in Asia Minor, but it remains for future archæologists to work out the relations between these civilizations and the simpler cultures of western and northern Europe. There is reason to believe that Palæolithic cultures underlie all of these ancient civilizations, but this will not become a certainty until more exploration is undertaken. Traces of Palæolithic man have been found in North Africa, Asia Minor, Siberia, and China, suggesting that the next generation or two may see the complete outline of man's career in the Old World.

THE NEW WORLD

The New World is in many respects a small scale replica of the archæology of the Old World. The Maya and the succeeding Aztec civilizations had developed writing and a calendar system for dating; consequently, many monuments and temples bear dated inscriptions and, thus far, the problem of the archæologist is much the same as in the Valley of the Nile and adjacent areas; it is possible to work backward from historical materials. But elsewhere there are no inscriptions and the archæologist must proceed in the anthropological way; yet, so far, the only finished piece of work is in New Mexico and Arizona where eight culture periods have been defined, as outlined in the following table (p. 106). This series also connects with historic time in one sense: viz., that the Spanish occupation of the area about 1540 gives us a cross-section of the culture at

that time, but this fact does not aid in estimating the number of years involved in this series of cultures. It is variously estimated, but ten thousand years seem adequate. No one expects this succession of cultures to hold for other parts of North America, because, as we shall see later on, the types of culture represented here are local and not diffused over the entire continent. Some advances have been made with chronologies for a few localities in the Americas, but, on the whole, no complete series is yet available; so nothing definite can be offered as a general chronology for the New World.

SEQUENCE OF CULTURES IN SOUTHWESTERN UNITED STATES

Pueblo V, or Historic—The period from 1600 A.D. to the present.
 Pueblo IV, or Proto-Historic—Characterized by a decline in culture, the disappearance of corrugated pottery, and the concentration of population in a relatively small area.

Pueblo III, or Great Period—The culmination of Pueblo culture, large towns and specialization in the arts.

Pueblo II—Small villages widely distributed and corrugated pottery elaborate.

Pueblo I, or Proto-Pueblo—The beginning of head deformation, village of rectangular rooms, and true masonry.

Late Basket Maker, or Basket Maker III—Pottery making appears, a long-headed population, pit or slab-houses.

Basket Maker II—Agriculture appearing, no pottery, use of the atlatl instead of the bow.

Basket Maker I—An assumed pre-agricultural stage.²

Remembering also that Africa and Asia are still virgin fields for stratigraphic research, we realize how little has been done and that a large task awaits the archæologists of tomorrow.

RELATION TO SOCIAL ANTHROPOLOGY

It is pertinent to consider the question as to what archæology can contribute to an understanding of community life. Some archæologists say that they have nothing to contribute; that they deal with man's bones and a few indestructible examples

² A. V. Kidder, "Southwestern Archeological Conference" (*Science*, vol. 66, 489-491, November 18, 1927).

of his handiwork and can, therefore, throw no light on his group life. In the large, this may be true, but the archæologist does give a great deal of information concerning the community life in each successive period. He can, for example, tell us whether he is dealing with the remains of a hunting community, or one engaged in agriculture. A general idea of the size of each community can be obtained from the arrangement of the fires, shelters, etc. The methods of burial give us an insight into the attitude of the time toward death and life.

An example of what archæologists can do in the way of reconstructing the community life of the past, may be cited under such works as W. J. Sollas' *Ancient Hunters*, and Keith Henderson's *Prehistoric Man*, in which the cave man is made to live again. In all these some allowance must be made for the imagination and for the substitution of what is known about present-day primitive peoples. When dealing with less remote periods the archæologist can be surer of his reconstruction, as, for example, in North America, where history begins in 1492 and all preceding that is archæology. Perhaps one of the most painstaking attempts of this kind is that for some of the prehistoric mound cultures in Ohio by Shetrone. After a thorough excavation of what is known as the Feurt village site in Scioto County, Ohio, Mr. Shetrone formulated a reconstruction from which we quote in part:

Approaching the village, by way of the trail which flanks the high hills along the eastern side of the narrow second terrace on which it is located, we first note that it comprises a community of several hundred persons. These—men, women and children—are seen to be of average size and physique, and in all physical respects similar to the well-known Indian of historic times. Before giving attention to their costumes and other personal details, we are impatient to satisfy our curiosity as to their village, at which we now have arrived. It appears to be rather carelessly and unevenly laid out, yet with a semblance of streets or passageways. On either side of these are ranged tepees of skins and bark and rude huts, built of poles and bark, and apparently, in some instances "chinked" with clay and grass, forming a sort of wattlework. Within these domiciles, or immediately adjacent thereto, are the family fire-places, made basin-shaped, of puddled clay. They serve both for

cooking and for supplying warmth. Everywhere, in and about these rude homes, are the residents of the village, variously occupied in their respective pursuits. . . .

. . . A party of hunters has just returned from the chase. They are armed with bows and arrows, spears, and various traps and weapons. They bring with them a bear, a deer, wild turkey, and numerous smaller animals and birds, as well as fish and mussels, taken from the river. Wild fruits and nuts, in season, are also a part of the bounty. Arrived in the village, the successful hunters turn over their supplies to the women, who dress and prepare the game for food.

The repast ready, the hungry hunters and their families squat upon the ground around the common kettle in which has been cooked a mixture of whatever may have been available. With their bone forks, used spear-like, they help themselves to its contents. . . .

A feature of the life of these primitive villagers which perhaps is the least pleasing of any we have observed, is the method employed in maintaining a semblance of public sanitation. While the accumulation of débris and garbage from the chase, the kitchen and other domestic activities, in and around their domiciles, is to be expected in an uncivilized people, it would seem that the Feurt villagers are determined to outdo all others in this respect. Instead of collecting and removing this garbage, they prefer the much more laborious method, when the accumulation becomes so great as to be unbearably obnoxious, of carrying earth and covering over or burying the débris where it lies scattered about. As a result of this, it is apparent that the level of the village already has been raised at some points as much as several feet above the original surface of the ground.

The only apparent justification that occurs to us, as we contemplate this peculiar proceeding, is that, should the archæologist, at some far distant date, chance upon the site where this village once had stood, and choose to explore its ruins, what a gratifying record of its erstwhile activities he would find!³

For the full reconstruction by this author, the reader should consult the original which deals with the industries, methods of disposing of the dead, religious beliefs, etc. The specific outline of social evolution cannot be recovered in this way. What may be expected, however, is that archæology will ultimately

³ H. C. Shetrone, *The Indian in Ohio* (Columbus, 1918), 214, 220-221, 223.

reveal the gross outline of man's development. It is generally believed that man's culture evolution is expressed in the succession of the Stone, Bronze, and Iron Ages, and for a part of the Old World this seems true, but the more detailed chronologies now available and to be expected in the future, present the succession in which processes of working stone, bone, pottery, metals, etc., appear. In our discussion of inventions and technology we shall refer to these processes in detail, but we may here offer the general statement that the way stone was handled by early cave man and the improvements on these methods from period to period, leave little basis for doubting that the use of stone for tools was an invention, made by the same kinds of minds as still invent. Yet, many authorities deny that cave men had much intelligence at the outset, so we should keep open minds. It is to be expected, however, that as archæology advances, we shall have a more satisfactory answer to this question. From the present outlook for anthropology, the only empirical approach to the evolution of human society seems to be through the data obtained by archæologists. Hence, the significance of archæology for social science lies in that it deals with materials resulting from community life and offers facts of succession in time by which theories of social evolution may be checked.

In a more specific sense, archæology enables us to study the growth of certain elements of culture. Pottery, as we have said, being one of the relatively indestructible works of man and also a medium plastic enough to lend itself readily to stylistic change, may serve to show how styles develop. An investigation of this kind is possible where great refuse heaps abound, as in Mexico, Southwestern United States, Egypt, Asia Minor, etc. It may be expected, also, that the early steps in the development of pottery may be recovered, so that we may know how that useful and wonderful art came about. We shall refer to this problem in later chapters, our interest here being merely to note the aid archæology promises in the solutions of problems in social anthropology.

Turning back again to the order of development in community life, the archæology of Palæolithic Europe demonstrates the age of certain practices of man. The use of fire is not

only one of the very early culture traits, but persists without essential change from that day to the present. It is therefore one of the oldest and, perhaps, the most fundamental of arts. It has been said, from time to time, that human society evolved around the campfire. Among some American Indian tribes the campfire is the symbol of the community unit, as when one speaks of a tribal group or a federation, as composed of so many campfires. Cooking food is another old art, thus closely associating bodily comfort and the satisfaction of hunger with the campfire. It may be that these two necessities have contributed to bring men together and thus promoted their social development, but one thing certain is their early appearance in the development of society. Again, in contrast to the permanence of the use of fire, archæology shows how most practices of man change after varying intervals, giving the impression that nothing human is stable. Even in early cave life, the forms and finish of stone tools changed, the choice of materials varied, and the interests of the group seemed to shift every now and then. It is, in fact, these changes of interest and method that mark the successive periods or strata in an archæological site. In an earlier chapter we considered the range of population in primitive groups and for somewhat similar reasons we may raise the question as to the length of time a custom or art will continue without change. History reveals how nations rise and fall; anthropology tells us that even primitive tribes cease to exist, that populations die out, etc. Archæology, by working out chronological tables, shows us that community life is far from static and that styles of objects change, but that a few traits have extended over a long period of time. Styles in decoration, whether on clothing, pottery, or other materials, seem to have been short-lived, as we know them to be in modern life. Yet, this is an aspect of human culture so little studied that we can do no more than cite it as a problem for research.⁴

SUMMARY

The beginning of prehistoric archæology as a part of anthropology dates back to the work of the Danish scholar, Thomsen,

⁴ A. L. Kroeber, "On the Principle of Order in Civilization as Exemplified by Changes of Fashion" (*American Anthropologist*, n. s. vol. 21, 1919).

who, about 1840, published the results of his careful observations on the position of artifacts in peat and refuse deposits. He seems to have been the first to conceive of the stratigraphic method now used by archæologists. This insight achieved by Thomsen gave one of the leads in anthropological research. As in the case of language, this also was objective in its procedure. Thomsen designated three main periods in the prehistory of Denmark, the Stone Age, the Bronze Age, and the Iron Age. Later, Sir John Lubbock divided the stone age into a Palæolithic and Neolithic period. Following the lead of Thomsen, prehistoric archæologists have discovered the sequence of cultures in the Palæolithic period of Western Europe, and in the New World, a fairly complete sequence for Southwestern United States. Progress is being made in other parts of both the New and the Old World, so that new local sequences may be expected in the near future. The skeletons of men found associated with the strata of the archæologist enable us to follow changes in man's biological type and to some degree the artifacts found throw light upon changes in social life. So, though the chief objective of archæology is to determine the time relations of culture, it does promise important contributions to social anthropology.

CHAPTER VII

THE TRIBE

We have reviewed two important research leads in social anthropology and now turn to a third. This new lead was developed by Lewis H. Morgan, a native of New York State. He was born in 1818 and, as a youth began to study the Iroquois Indian language and the social organization of the tribe. Though Morgan began with original materials and worked independently, there was in Europe also a movement under way to examine the foundations of our social systems. One of the landmarks in this development was the appearance, in 1861, of a book on *Ancient Law* by Sir Henry Maine, in which he attempted to prove that modern society was based upon the conception of the father as the head of the family. Strangely enough, in the same year, J. J. Bachofen, in Switzerland, published a volume under the title of *Das Mutterrecht*, in which he argued for the mother as the original head of the family, or, at least, that inheritance was originally through the mother and that the type of society Maine was expounding as basic and fundamental was of recent origin and restricted in distribution. These epoch-making volumes were followed in 1865 by J. F. McLennan's *Primitive Marriage*, which also favored female inheritance as preceding male inheritance, but asserted that the original condition was one of promiscuity.

Morgan, Maine, Bachofen, and McLennan were lawyers of outstanding ability, and so far as can be ascertained, each took up his problem and practically completed his work in ignorance of the other. Their books stand as classics in this field. Yet, Morgan was the only one of this remarkable group who dealt first hand with data on primitive peoples. He conceived his problem while learning the language and culture of the Iroquois Indians. To him, therefore, more than to the others, social anthropology is indebted.

As far as possible, he made objective observations, using chiefly data on relationship systems and marriage. The former may be said to have been discovered by him and first used in a scientific way. Morgan lived in the neighborhood of the Iroquois Indians of New York State. These Indians had developed an interesting federation of the six formerly independent but linguistically and culturally related tribes. This was known as the League of the Iroquois and was a particularly fine instrument of government. It impressed the young mind of Morgan and led him on to an exhaustive study of Iroquois culture, the results of which were published in his well-known book, *The League of the Iroquois*, 1851. Morgan noted many peculiar features in the social structure of these tribes, conceiving that the more complicated forms of the League were an outgrowth of the simpler family systems maintained by the Iroquois. The peculiar methods of reckoning blood relationship found by Morgan among the Iroquois were first regarded by him as an idiosyncrasy of that people, but in 1856 he made a business trip to Michigan where he found a similar system among the Ojibway. Immediately he conceived of these systems as the basic forms of society, forms which could be determined objectively. Believing that civilized man developed from a primitive state and that the relationship and marriage systems he now follows were not the original forms of his primitive ancestors, Morgan set himself the task of a world survey to determine the kind and number of relationship systems among primitive tribes. He, himself, visited many Indian tribes, and, by correspondence, gathered information from other parts of the world. His final conception was, that relationship systems usually outlived their usefulness and so could be taken as objective evidence for the reconstruction of the successive marriage systems followed by man. This will become clear from the discussion to follow. The value of Morgan's work lies not so much in his interpretations, but in that he discovered an empirical approach to an important problem. His book on *Ancient Society* summarizes his researches and his theories of society. However, before we review the specific problems formulated by Morgan, it may be best to discuss the simpler aspects of tribal organization.

MORGAN'S IDEA OF THE TRIBE

It is frequently said that whereas psychology deals with the functioning individual and is, in that sense, a biological science, social anthropology deals with the human group and is, in consequence, a social science. This distinction is a useful one to bear in mind, though neither psychology nor anthropology strictly conforms to it, but the statement does show where the emphasis is placed and so reveals the point of departure in the respective lines of investigation. Now, if the human group is the unit phenomenon in anthropology, just as the individual is in psychology, it becomes necessary to define this unit. In the second chapter we dwelt upon the community aspect of human life and suggested that a community, as defined, was the elemental unit recognized by social anthropology. Nevertheless, such elemental communities, more often than not, live in clusters, possess much in common, and function more or less under one political system, to which the term tribe is applied. It is apparent, therefore, that a definition of this term is needed especially if we make a world survey of the groups anthropologists study: for example, the American Indians constitute a people, but among them are many divisions, for instance, the Pawnee, Iroquois, etc. The Iroquois comprise six tribes federated for mutual advantage.

In other words, the aboriginal Indian in North America presented much the same grouping as the White population does at present. First, we note certain major groups comparable to Canada, the United States, etc. Then, we find the United States composed of states and these subdivided into counties, etc., ending with villages as the smallest units. Obviously, anthropology must have criteria by which the social, or culture unit, may be identified, when found.

Such a unit is usually designated as the tribe and, bearing in mind that anthropology has given most of its attention to primitive man, we may ignore such questions as the elemental unit in the United States and seek it among primitive peoples.

Morgan was the first anthropologist to face this problem. He characterizes an American Indian tribe as follows:

It is difficult to describe an Indian tribe by the affirmative elements of its composition. Nevertheless it is clearly marked, and is the ultimate organization of the great body of the American aborigines. The large number of independent tribes into which they had fallen by the natural process of segmentation is the striking characteristic of their condition. Each tribe was individualized by a name, by a separate dialect, by a supreme government, and by the possession of a territory which it occupied and defended as its own. The tribes were as numerous as the dialects, for separation did not become complete until dialectical variation had commenced. Indian tribes, therefore, are natural growths through the separation of the same people in the area of their occupation, followed by divergence of speech, segmentation, and independence.

The exclusive possession of a dialect and of a territory has led to the application of the term *nation* to many Indian tribes, notwithstanding the fewness of the people in each. *Tribe* and *nation*, however, are not strict equivalents. A nation does not arise, . . . until the tribes united under the same government have coalesced into one people, as the four Athenian tribes coalesced in Attica, three Dorian tribes at Sparta, and three Latin and Sabine tribes at Rome. Federation requires independent tribes in separate territorial areas; but coalescence unites them by a higher process in the same area. . . . The confederacy is the nearest analogue of the nation, but not strictly equivalent. . . .

The manner in which tribes are evolved from each other can be shown directly by examples. The fact of separation can be derived in part from tradition, in part from the possession by each of a number of the same gentes, and deduced in part from the relations of their dialects. . . .

This process of subdivision has been operating among the American aborigines for thousands of years, until several hundred tribes have been developed from about seventy stocks as existing in as many families of language. Their experience, probably, was but a repetition of that of the tribes of Asia, Europe, and Africa when they were in corresponding conditions.

From the preceding observations it is apparent that an American Indian tribe is a very simple as well as humble organization. It required but a few hundred, and, at most, a few thousand people to form a tribe and place it in a respectable position. . . .¹

¹ Lewis H. Morgan, *Houses and House-Life of the American Aborigines* (U. S. Geographical and Geological Survey of the Rocky Mountain Region, Contributions to North American Ethnology, vol. 4, Washington, 1881), 17-18, 20-21.

The essential core of this characterization is, that when a primitive group which regards itself as distinct and operates as a unit is found, one can say that he has under observation a concrete example of the phenomena social anthropology has chosen for its field of investigation. True, the reader who must have precise and unvarying definitions will find difficulties in applying the above criteria, because a living tribe must be taken as it is found, and, according to its fortunes, may fall short in some of these characteristics. But it still remains true that the anthropologist does not begin his investigations until he finds a group operating as a culture unit. And, as a rule, he accepts the testimony of the group as to what individuals compose it.

NATURE OF A TRIBE

Following Morgan many writers have proposed definitions for the term *tribe*, all of which vary little from his comprehensive statement, as instanced in *Notes and Queries on Anthropology*:

Tribe—A group of a simple kind, nomadic or settled in a more or less definite locality, speaking a common dialect, with a rude form of government, and capable of uniting for common action, as in warfare.²

It so happened that most of the writers, finding it necessary to formulate working definitions for a tribe were primarily interested in social problems and so were concerned only with the functioning social unit. On the other hand, those interested in biological problems also consider the tribe a unit. This means that the tribe is an inbreeding group, for, as we shall see later, most marriages are within the tribe and not intertribal. Thus, the tribe consists not merely of a group of persons arbitrarily segregated by more or less rationalized social systems, but is a biological group, reproducing its kind and developing structurally and functionally. In some respects, the biological tribe is more objective and approachable than the social tribe, since social distinctions and classifications are mainly in the minds of the individual members and so are not subject to direct obser-

² *Notes and Queries on Anthropology*. Edited by Barbara Freire-Marreco and John Linton Myres (Fourth Edition, London, 1912), 156.

vation, as are the faces and bodies of the tribe members. Our concern here, however, is with the objective fact that the tribe is an inbreeding and, for the most part, a self-perpetuating group, and first and last a stern biological reality, the social functionings of which are selected for study and dealt with in relative isolation. So, to the usual definitive characters of a tribe, should be added its inbreeding biological aspect.

Thus, summarizing the various definitions offered by social students and, recognizing the biological nature of the group, we select the following outstanding characteristics of a tribe:

1. Designation by a specific name.
2. Possessing unity in speech, or a dialect peculiar to the group.
3. Claiming possession of a definite range or habitat.
4. Constituting an inbreeding or intermarrying group.

If the tribe were a simple indivisible unit, we could end the discussion here and proceed with an account of its social functions, but we find the case otherwise, so it will be advantageous to consider, in succession, the four points enumerated in our accepted definition. However, a word of caution may be offered as to the use of the term, tribe, in ethnographic literature, because it sometimes applies to what are subdivisions of the self-recognized tribal unit, and at other times designates a federation of tribes.

THE TRIBE NAME

Having now learned that a tribe is an objective fact, most readily defined by the conscious limits set by the group itself, we may consider the significance of the tribe name. Many observers have called attention to the lack of a specific tribe name in the current speech of the tribe, the tendency being to speak of their own, as *the* people, *our* people, etc. On the other hand, we find in the current speech of a tribe, names for neighboring tribes. These names are usually descriptive, as, Sarsi (not good), Blackfoot, Gros Ventre, etc.

There is probably nothing significant in this because we find a close parallel in our own family life, as within the family circle we almost never use the family name, but collective pronouns as *our*, *we*, etc., while, in speaking of others, we use

names such as Hill, Miller, and Thomas. If there is something fundamental here, it is a matter of psychological behavior, possibly the recognition of a distinction between ourselves and outsiders, or perhaps a reluctance to use the name which outsiders apply to us. Returning to the subject of tribal names, we observe that frequently these names, as used in literature and intertribal communication, are words in a language foreign to the tribe to which they are applied and were, usually, derogatory. Yet, in intertribal gatherings when a tribesman asks another as to his status, he will use the term applied to his tribe by outsiders. Hence, the name should be judged by its function. Obviously, when a tribe has more than one neighbor, it will possess specific names for each, and if there is repeated contact or a community of tribes, they will come to a common usage by adopting one of these names. In general, then, one may say that the specific tribe name originates among neighboring tribes and may eventually be accepted by the tribe to which it is applied. Yet, it is the experience of anthropologists that primitive tribes put no great store upon this name, there being little that is comparable to a national name around which are associated ideas and emotions of patriotism, duty, superiority, etc. Yet, we do find such responses in the primitive tribe, but more directly associated with the tribal personnel than with symbols. We know of no tribe which regards itself as inferior to its neighbors; always it is, "we are the people." Thus, Doctor Walker, a close student of the Dakota, writes of the instruction given to young men seeking to qualify as shamans, stating as the first pronouncement:

The Lakotapi are the original people, superior to all others of mankind, and it is a matter of grace on their part to concede rights of any kind to any other people.³

As given the native term Lakotapi, from which we derive the name Dakota, is used by that tribe to designate its members and seems to mean literally, "friends, brethren," etc. The term, therefore, connotes a specific group of individuals and in that

³ J. R. Walker, *The Sun Dance and Other Ceremonies of the Oglala Division of the Teton Dakota* (Anthropological Papers, American Museum of Natural History, vol. 16, part 2, 1917), 72.

sense defines the tribe. It may well be that Morgan overstressed the name, apparently confusing the tribe name and the term applied to certain tribal divisions, but we are justified in giving it a place in the definition because it serves to fix the limits of tribe membership. This is what we had in mind at the outset, when stating that the tribe or culture unit, was, in practice, whatever the tribe members considered it to be. It may be large or small, simple or complex, according to its internal structure. It may be one community, or several communities regarding themselves as one people, under a single control. As conceived, a tribe functions both politically and culturally and, as there is usually a leader or chief, European governments have always dealt with a tribe as with an independent nation.

SPEECH UNITY

In the chapter dealing with language we noted the necessity for the social unit to possess a standardized speech. Probably no other phase of group life is so highly standardized. Our attention was called also to the tendency for each social unit to have its own language or dialect. In the same sense that the speech of civilized man betrays his nationality, so would that of a savage reveal his tribe. Hence, it is correct to say that under normal conditions each tribe possesses peculiarities of speech. Nations also find it necessary to standardize a national language. The linguistic history of France, Germany, and other European countries gives good examples of how, with the growth of a nation, local primitive dialects may be displaced by an arbitrarily standardized language. The French language is said to have developed as a corrupt Latin combined with native dialects and, after the fall of the Roman Empire, a number of such Latin hybrid dialects sprang up, some of which are still spoken in their original localities. Gradually, however, the various independent states were federated, and finally one of these dialects was standardized as the official language of the nation. The history of the English language will show an analogous development. Perhaps one of the important factors in nationalizing the speech of England, Germany, etc., was the translation of the Bible.

National histories reveal, then, that these larger political units have been built up through the federation and subjugation of tribes or groups of tribes each having originally had linguistic individualities, some of which survive in the folk speech of such localities as support a residuum of the old tribal population. Rarely was an Old World nation composed solely of the descendants of a single tribe and so could not possess unity of speech at all times; rather did it grow by joining tribe to tribe, and step by step standardizing an official speech, which, under modern conditions, becomes a national language.

Returning to our definition, we can realize the significance of the statement that a tribe is revealed and segregated by speech, and in addition to a distinct tribe name, can claim a language or a dialect as its own.

Morgan gave considerable weight to a tribal core of beliefs, the recognition of gods and sacred places, as peculiar individual possessions of the tribe. Later, we shall find that many tribes share these in common. However, language is the carrier for such conceptions, and while we have not given beliefs and practices a formal place in our characterization of a tribe, it may be well to remind ourselves that the tribe does frequently regard these as peculiar possessions and that their gods are regarded as exclusively their own, even though a number of other tribes have the same. So, it remains to be seen whether these matters of belief are as distinctly peculiar to a tribe as the name, forms of speech, etc., with which we are now concerned. We have, however, dwelt upon these points to emphasize one factor in tribal behavior, viz., that there is a response on the part of tribe members indicating some consciousness of group possessions, something to be cherished and protected, something belonging to the group.

TRIBAL TERRITORY

In an earlier discussion of the primitive conception of property in land, we reviewed customs respecting hunting territories and agricultural lands, observing that the primitive community does regard more or less definite parcels of land as their own. While it is true that primitive peoples do not recognize individual ownership in land, as we conceive it; yet, on the other

hand, every tribe seems to claim some territory as its collective home. More often than not, the boundaries to such tribal territories are fixed in the minds of tribesmen. From the first the American colonists were annoyed because the Indian tribes, though apparently nomadic, stoutly insisted upon their rights to return to specific village sites and hunting lands.

When sedentary modes of life are encountered, the villagers not only claim their dwelling sites, but if agriculturists, the adjacent tillable lands and, as a rule, there is an uninhabited zone surrounding each village which is also claimed. These lands are conceived as belonging to the tribe and inalienable, except by tribal consent. The history of native subjection by European nations reveals a strong attachment of the tribe to the home land. When new lands were provided and the tribe moved, as was the case with many Indian tribes, the shock was obviously great. Even with the most primitive tribes, their beliefs, as well as daily routine are concretely experienced as associated parts of the trees, rocks, streams, etc., making up their home land.

TRIBAL ENDOGAMY

In the enumeration of tribal definitive characters, we emphasized the biological type. This was dwelt upon at length in the second chapter as the organic basis to community life, but it seems necessary to refer to it again. Tribes are often credited with family-like resemblances which we have referred to as inherited characters. Tribes are also regarded as units in larger race groups and so possess race characters of wider range than tribal characters.

It is usual to assume that differences in race type arose as variations in inbreeding tribal groups. In fact, there is no other way one can conceive of their origin and their perpetuation. We know that peculiarities of pigmentation and form are inherited in families round about us and that we ourselves carry resemblances to our parents. When to this is added experience in the breeding of domestic animals, it brings into play a background, on the basis of which, one feels certain of this assumption. Nations are inbreeding groups. This does not mean that there is no interchange of population, as in

immigration, but does remind us that except in colonies where immigration is rapid, the main body of the nation remains at home and in that sense is inbreeding.

Modern nations, however, do not fully parallel primitive conditions. In some of the older literature on marriage great emphasis was placed upon the idea of alien wife capture to avoid incest, or to meet an hypothetical shortage of women. This was at a time when the information on primitive peoples was scattering and not well organized and when the method of interpretation was checked, not by random sampling, but by seeking until one found information that did agree with the initial assumption. The classical example was found in Australia where some tribes practise a ceremonial wife capture. This is not the time to consider in how far the presence of such a ceremony warrants the assumption that, formerly all wives were obtained by going out into the enemy's country and capturing women, since we are concerned now with the frequency of actual wife raiding. The Australian examples seem to reduce to certain regions in which each camp, or group, recognized another group or two into which individuals could marry. Assuming, for the moment, that there were no other ways in which these groups cooperated, they might qualify as tribes, yet, each pair of groups between which marriage was the rule would constitute an inbreeding group. Further, the continued intermarriage of two or more groups would surely bring about some degree of speech uniformity and culture harmony, thus approaching the characteristics expected in a tribal unit. Yet, in any case, the data do not warrant us in referring to the Australian examples of indiscriminate wife capture as typical of primitive man.

Returning to a wider review of the literature, it seems that while there is an occasional capture of women as the spoils of war, the usual rule is for marriage to take place within the group having a common tribe name as well as speech and culture uniformity. This means that mankind lives and propagates in inbreeding groups. It is not to be taken that no intertribal marriages occur, but that these are incidental.

Students of physical anthropology often recognize resemblances among the members of a tribe analogous to family

resemblances in our own population. This is what should follow if there is a great deal of inbreeding.

It appears then that relative biological homogeneity is a characteristic of the tribal group and that, in consequence, the conditions are favorable to tribal individuality, of the development of tribal types. However, among the outstanding characteristics of the tribe are its homogeneity in bodily appearance and speech. The former is emphasized by uniformity in dress.

BANDS AND LOCAL GROUPS

We turn now to a subdivision of the tribe heralded by many students of society as the elemental units. This is the band, the local group, or the community, as we noted in the second chapter. A tribe may be small enough to live in a single camp or village and always move about and operate in a body, but this is seldom the case. What we usually find in true hunting peoples and simple cultures are a number of camps or bands, living or operating in adjacent districts, but maintaining a tribal organization and from time to time assembling as a whole. Good examples of this are found among the American Indians, especially among the Plains tribes.

A tribe of Plains Indians was made up of a number of bands, —in the case of the Skidi Pawnee, thirteen, the Piegan Blackfoot, twenty-three. A rough estimate of the number of persons in a band gives the range as from twenty-five to seventy-five, or from six to twenty adult males. As these were large tribes, this may be taken as the approximate maximum. Each of these bands had a name and was more or less fixed in the tribal scheme, but new ones were often formed. In winter, the tendency was for each band to camp alone in sheltered places, among the trees that grew near the margins of streams. When summer came, however, it was customary for all the bands of a tribe to assemble in a single camp and operate as a unit. The tribal camp was pitched in a circle in which each band had its traditional place, so there was little confusion in making camp. Each band had a leader or two, and these leaders composed the council, or main governing body of the tribe. One of their number was recognized as the tribal leader, or head chief.

Later on we shall encounter a form of tribal organization in which the divisions become permanent and one's membership in a division is inalienable, but the type of band we are now considering is the loose natural grouping of men with their families around a leader. A man could change his band and rival leaders could solicit followers, thus forming new bands. As these bands usually lived apart, they appeared to be local groups; hence, the name.

This breaking up of the tribal camp and scattering of families in winter is still more accentuated in the forests of Canada, where, for the sake of trapping and feeding, a family or two winters together, but when summer comes the tribe again assembles in a single camp, performs ceremonies, etc. Still further north are the Eskimo who are frequently referred to as having no tribes whatever, but this is largely a matter of definition, for though the Eskimo live in small camps, they recognize group relationships.

Stefansson, writing of a tribe of Eskimo on Coronation Gulf, states that:

In winter most of them are found on south Banks Island just east of Nelson Head. They leave here late in March, cross the straits to Prince Albert Sound, and here the tribe scatters in all directions. Some go thirty or forty miles south; some sixty or seventy miles southeast; some forty or fifty miles northeast; and occasionally all the way across the island to Collinson Inlet, while the larger number go about one hundred miles east up the Kagloryuak to where it heads near the head of the Ekalluktok which flows from the center of Victoria Island east into Albert Edward Bay. At this point four or five families separate themselves from the rest, descend the Ekalluktok and cross the straits to the mainland in the vicinity of Ogden Bay. It seems they reach this point annually the early part of June, for it is here they have to abandon their sleds and proceed south carrying back loads and their dogs also carrying packs, for they are bound overland to the Akiliniq River. Usually, on the way they are joined by a few families of the Ekalluktogmiut in Albert Edward Bay and later by some families of the Ahiagmiut at Ogden Bay. The united parties march overland and some time in July they come to Back River which they call the Haningayok. Their visit is expected by a party of

the Haningayogmiut, who are ready for them with kayaks to ferry them over.

The party then proceeds south and it is probably early in August that they reach the trading rendezvous on the timbered section of the Akililik River. . . .

These trading parties of the Haneragmiut usually do not get back to join the tribe that year, but return only as far north as the vicinity of the Kent Peninsula. They sometimes proceed some distance west into Bathurst Inlet or even into Coronation Gulf proper, but never continue far enough west to reach the vicinity of the Coppermine and to return home by the route which we followed on our spring journey in 1911. Instead they always turned back to Albert Edward Bay and ascended the Ekalluktok River by sled in spring to join their countrymen the second summer after their departure on their summer hunt in the middle of Victoria Island.

Meantime another party has gone east towards the Akililik to make in turn the same round. It seems to be seldom that any individual of the Kañhiryuarmiut will make this trip more than two or three times in a lifetime. On the other hand, there seems to be a good half of the tribe who have made the trip at one time or another.⁴

In this case, what is considered a tribe is a number of loosely articulated local groups, each composed of little more than a family or two which shifts its residence frequently in the food quest. From time to time, however, these gather in larger groups and occasionally the whole tribe assembles. The White observers are usually impressed by the seeming total lack of tribal organization and especially the complete absence of any centralized authority. Each local group is apparently a law unto itself. However, there are established customs for procedure when a number of these local groups assemble and when the whole tribe is together, which do, after all, constitute a core of tribal organization.

Australia offers other examples of what may have been considered the most elemental units of social organization. According to Davidson:

⁴ V. Stefansson, *The Stefansson-Anderson Arctic Expedition of the American Museum: Preliminary Ethnological Report* (Anthropological Papers, American Museum of Natural History, vol. 14, part 1, 1914), 36-37.

The tribe in Australia is a very loose organization which seems to demonstrate some semblance of social, linguistic and geographical unity but which lacks entirely any political cohesion. The Australian tribe has no form of government and, therefore, it has no control over the various constituent groups which compose it. As far as the tribe itself is concerned, there is not even a symbol of unity in a political sense, such as might be expressed in a leader with nominal power or in a loosely organized council. Such evidences of political control are to be found in the so-called local groups, the geographical and political elements which in the aggregate form the tribe. A tribe seldom, if ever, acts as a unit either when minor fights (never wars, in the usual meaning of the word) are in progress, or when the great assemblies for the promotion of ceremonies and social customs are held. A tribe is no more than a great number of local groups among which there is a mutual recognition or affinity in all branches of culture and language. Very often a whole tribe or the greater part of it may meet for the performance of various ceremonies, but such meetings seem to be only incidental to tribal integrity, for seemingly just as often these may be attended by some only of the local groups from one tribe or from different tribes. At such a gathering, members of the local groups present are never regarded as the representatives of the tribe to which they respectively belong, for the question of their presence or absence at any function is decided by each local group, itself, each acting independently and without regard for the decision of any other. When differences arise between two local groups or between their members, the matter is regarded as purely a local one to be settled by the local groups concerned, and the resulting fight, generally no more than a ceremonial one which ends upon the first drawing of blood or a death, is never looked upon as a tribal affair. There are no political alliances of any kind between one local group and another, for defense and offense are absolutely unknown in aboriginal Australia. Difficulties between the local groups are settled by a regulated battle at a place designated for the occasion.⁵

We have dwelt upon these examples of grouping because writers, seeking origins to the social order, seize upon the elemental bands as found among the Eskimo and the Australians as the basic units in society. They call it the local group, and

⁵ Daniel Sutherland Davidson, *The Chronological Aspects of Certain Australian Social Institutions as Inferred from Geographical Distribution* (Philadelphia, 1928), 83-84.

visualize it as a slightly enlarged family, a very primitive community, occupying a small bit of territory. This does seem to be the last word in simplicity, but is probably an adaptation to living conditions, for it is clear, when we examine their mode of life, their beliefs, and their speech, that these groups are not operating in isolation, for they have, in common, many of the things that indicate a tribe as we have used that term. It may well be that the local group is the simplest form of community life and, in so far, it is interesting in itself. What now concerns us is that the bands, with their leaders, are divisions of a larger group, the tribe. Further, a general survey of primitive society reveals a great deal of transient and temporary grouping under leaders. This is seen in hunting, in war, in games, in social affairs, and in religion. It is only when the leader and his team with their wives and dependents, camp apart from the parent bands, that this rises to the level of a local group, or a band, and then it is of little significance until individual affiliation with the band becomes permanent. However, once this occurs, we have a new division of the tribe. Where data are available this is observed to be the manner in which new bands are formed. Finally, leadership is the basic factor in local groups and bands. We have seen how new bands are formed through the initiative of an ambitious individual possessing the superior qualities that make for leadership. Above all, the leader of a primitive band must accept responsibility for feeding and protecting it, and see to it that all members work together effectively.

Space does not permit a world survey of tribal subdivisions, but it is suggested that the reader make a superficial review of a few people, as the Algonkin tribes of northeastern America, the Chukchee and Koryak of Siberia, the Eskimo, and Australian natives. This will sample the simpler types of bands and local groups. The more systematic types of organization can be considered later. Some social anthropologists see in these bands the materials from which tribes are made, and in one sense this seems a justifiable assumption. It appears, however, that tribes are not formed out of disparate bands, but by the closer federation of recently formed bands having a common origin. This may occur through the rapid increase of population in one band,

resulting in the throwing off of a number of new bands, all keeping in close touch with each other and thus preserving uniformity in language and culture. However this may be, the distribution of independent bands or communities, in contrast to that for tribal systems, suggests that the former is a characteristic of harsh environment. We find it, for example, among the Eskimo, the hunters of the long winter in the Canadian north, in the colder parts of Siberia, and in the extreme southern part of South America; it also appears in arid districts where the natives have not adopted agriculture, as parts of Australia, and Nevada in the United States. The correlation is not absolute, but as geographers have pointed out before, regions of extremes of dryness and cold are the homes of crude cultures rather than the reverse.

Finally, a review of the data now available suggests that when a tribal organization begins to take definite form, the tendency is to become systematic and to fix the band units. At least we find, in most cases, the formal recognition of band membership as hereditary. When such is the case, it is customary to speak of them as *gentes* and *clans*; the former is used when the child takes the band of the father, the latter when he follows the mother. Special duties and functions may come to be associated with these bands, which naturally tend to perpetuate this form of social organization. Later we shall see how they may play the major rôle in regulating marriage and relationship, as well as the tribal government.

ORIGIN OF NEW TRIBES

Morgan conceived the process by which new tribes are formed, as follows:

An Indian tribe is composed of several *gentes* [subdivisions of the tribe], developed from two or more, all the members of which are intermingled by marriage, and all of whom speak the same dialect. . . . The instances are extremely rare, among the American aborigines, in which the tribe embraced peoples speaking different dialects. When such cases are found it has resulted from the union of a weaker with a stronger tribe speaking a closely related dialect, as the union of the Missouris with the Otoes after the overthrow

of the former. The fact that the great body of aborigines were found in independent tribes illustrates the slow and difficult growth of the idea of government . . . A small portion only had attained to the ultimate stage known among them, that of a confederacy of tribes speaking dialects of the same stock language. A coalescence of tribes into a nation had not occurred in any case in any part of America. . . .

New tribes . . . were constantly forming by natural growth, and the process was sensibly accelerated by the great expanse of the American continent. The method was simple. In the first place there would occur a gradual outflow of people from some overstocked geographical center, which possessed superior advantages in the means of subsistence. Continued from year to year, a considerable population would thus be developed at a distance from the original seat of the tribe. In course of time the emigrants would become distinct in interests, strangers in feeling, and, last of all, divergent in speech. Separation and independence would follow, although their territories were contiguous. A new tribe was thus created. This is a concise statement of the manner in which the tribes of the American aborigines were formed, but the statement must be taken as general. . . . When increased numbers pressed upon the means of subsistence, the surplus removed to a new seat, where they established themselves with facility . . . Among the Village Indians the same thing repeated itself in a slightly different manner. When a village became overcrowded with numbers, a colony went up or down on the same stream and commenced a new village. Repeated at intervals of time, several such villages would appear, each independent of the other and a self-governing body, but united in a league or confederacy for mutual protection. Dialectic variation would finally spring up, and thus complete their growth into tribes.⁶

With some modification, this view is consistent with present knowledge, because in the formation of new bands we see the natural throwing off of a new dependent unit. By natural growth such a band might become large enough to function as a tribe, or several bands might join to form such a new tribe. Once the step was taken a moderate amount of isolation would do the rest.

⁶ Lewis H. Morgan, *Houses and House-Life of the American Aborigines* (U. S. Geographical and Geological Survey of the Rocky Mountain Region, Contributions to North American Ethnology, vol. 4, Washington, 1881), 18-20.

As one scans the literature on primitive peoples, he may be impressed with the lack of detail as to the government of the group. It is true that something will be said under that head, but compared to the treatment given social organization, for example, the accounts often amount to nothing. It is clear, therefore, that anthropologists are not interested in the subject, probably because they see no problem in it. For one thing, most studies of primitive life are made after the tribes have been in contact with Europeans and frequently after the control of the group has been taken over by European officials. There is, therefore, little opportunity for seeing primitive government in operation. Yet, this does not fully account for the deficiency, for, though many phases of community life have also ceased to function, detailed accounts of these can be obtained from natives old enough to remember about them. It does seem, then, that for the time, there is less interest in the subject of primitive control than in other phases of group life. This lightens our task. However, the one feature that stands out in relief is that wherever we turn, the community looks to a male leader, or chief. In fact, this seems to be one of the universal characteristics of man, to engage in teamwork under the guidance of a leader. One may assume, with some confidence, that the abler the leadership of the primitive group, the more intensively will it function.

We have called attention to the tendency for groups to separate. Such separations are not always peaceful, as a quarrel between the leader and a rising rival may send the latter afield with his sympathizers. Tribal traditions regarding such separations are frequently encountered, as a certain Indian tribe states the cause of its separation from the main body to have been disagreement over the division of a buffalo killed in the hunt. Again, separation may follow a murder, but in all such cases the native accounts suggest that, unless the seceding section has reached the point where it is rather large, it will return after a time. In any case, the separatists follow a leader who is, in that respect, a chief.

The chief, or leader, usually functions as the head man, or

chairman, of the older men, at least, those possessed of sufficient wisdom and personality to command respect. In a community of two hundred souls, this council of elders may number twenty, but rarely more than this number. The remainder look to this group for guidance and approval, and, if the leader is of forceful character, dominating the elders, directly to him. Among primitive people, as a rule, the leader does not directly inherit his office, but is more or less formally selected by the elders. In all these matters, however, there are great variation and regional differences, as may be noted in the accounts of observers, meager though they are. Murder, theft, abduction, adultery, etc., occur everywhere and must be dealt with by this governing group; it is also the disciplinary body, direct or indirect.

However, as long as a single community operates in full independence of others, all such problems as we have just noted are met in simple, more or less informal ways. Primitive people are especially sensitive to ridicule and the adverse opinions of their fellows. This, more than anything else, tends to hold the members of a community true to the form upheld by the older members. There is also, aside from the mere respect for leadership, the added dread of magic power claimed by certain older tribe members. It is when a number of communities attempt to work together as a tribe that true politics comes into view. More complex still, such organizations of tribes occur and are spoken of as federations, forms of which are found in many parts of the primitive world. A true federation, however, rarely occurs among tribes speaking diverse languages, and, of course, is always found among neighbors. The fact that usually it is a group of related tribes that federates, suggests the process as a natural peaceful one and not the result of forcible subjection by the most powerful member. Conquest apparently develops after federation; first, perhaps, the federation gains in solidarity of defense against outsiders and when strong enough, launches out upon a career of conquest. It was by the latter method that the great barbarian kingdoms of the New World were built up. The reader knows how the Spanish discoverers of America found in Mexico and Peru large groups of subjugated tribes, under the sway of a relatively small fed-

eration. For example, the aboriginal City of Mexico, attacked by Cortez, was a solidly organized group of Aztec tribes, who in one way or another had subjected and levied tribute upon almost the whole of what is now Mexico. Much the same sort of controlling body was found in Peru. That something like this went on in the Old World we know. Greece, for example, acknowledged its beginning to lie in a federation of tribes.

The one primitive federation concerning which we have complete knowledge is the League of the Iroquois Indians, in what is now New York State, which was investigated by Morgan early in the nineteenth century.⁷ Five closely related, but politically independent, tribes are said to have voluntarily set up this remarkable federation, under which they maintained their autonomy. The ruling power was vested in a council of fifty members, with a system of voting by which each tribe was given a kind of proportional representation. The homes of these tribes were in the Mohawk River Valley, ranging from Albany westward, almost to Buffalo. Shortly after the Dutch settled in New York, the Iroquois launched upon a series of conquests, eventually mastering the whole country from Virginia and Tennessee on the south to the district beyond the St. Lawrence and the Great Lakes on the north, and on the west to the Mississippi River, which control they exercised for more than a century. The detailed accounts of this federation and its conquests will be worth reading in full, for while this federation of a simple hunting and partially agricultural people possesses some unique features, the main outline of its evolution gives a fair picture of what appears to have happened in many other parts of the primitive world.

It is not difficult to see that when a federation is formed, there is need of some kind of formal legislation. Established customs and traditions will do very well for the cooperation of individuals within the tribal group, where the governing body includes practically the whole of the older adult men; but when it comes to the teamwork of several such tribal communities, some form of representation is necessary, agreement as to the delegation of authority must be entered into and new rules of

⁷ Lewis H. Morgan, *League of the Ho-De'-No-Sau-Nee, Iroquois* (Rochester, 1854).

action and procedure decided upon. This calls for legislation and the setting up of adequate machinery to carry on.

As may be surmised, the forms of tribal governments vary greatly, and until more intensive studies of these are made there is little to gain by describing them in detail. As an example, the following account of the Delaware Indians by the distinguished missionary, Zeisberger, writing about 1781, is quoted:

Each of the tribes has its chief and each chief his counsellors. . . . A chief may not presume to rule over the people, as in that case he would immediately be forsaken by the whole tribe, and his counsellors would refuse to assist him. He must ingratiate himself with the people and stand by his counsellors. Hence, it is that the chiefs are generally friendly, gracious, hospitable, communicative, affable and their house is open to every Indian. Even strangers who come on business put up in the chief's house and are accommodated with the best it affords. The ambassadors of other nations generally lodge with the chief and they are well cared for. . . .

In externals a chief has no advantages above others. He must provide for his own maintenance, for no one is under any obligation to supply his wants. His wife, whose duty it is to provide sufficient corn for the year, is usually assisted by other women in her plantations, for much corn is required in such a house. If the chief is young and able to hunt he will, his official duties permitting, occasionally join the chase. . . . In case he is old his friends, of whom there are usually many, and other Indians will furnish him with game, especially if he be popular. . . . In case there is something of particular importance to consider, only the chief and the counsellors assemble and determine upon the matter. . . . When they gave him [the chief] their opinion, he either approved of it or indicated what was missing or not correct in the speech, upon which they would make the necessary amendments. Thus he kept them active and was held in great esteem.⁸

In general the chief does not speak in council, but has his speaker to whom he communicates his sentiments briefly and leaves him to expatiate on them. The latter must be able to put the whole matter in a speech well arranged, which requires a clear and open

⁸ A. B. Hulbert and W. N. Schwarze, *David Zeisberger's History of the Northern American Indians* (Ohio State Archæological and Historical Society, 1910), 92-93.

understanding, a faithful memory, experience in the affairs of the state and a knowledge of the formal language employed in council, which differs as much from the common language as does the language used by the whites in legal procedure, from the language of ordinary intercourse.

The council meetings are as quiet and orderly as if they were acts of devotion. Noises, talking and laughing are not heard, even though the young may be present. All pay strict attention to the speaker. . . . If the subjects are of great importance all who take part in the discussion stand as they speak. Each counsellor has the liberty to utter his sentiments and having made his speech, sits down. No one interrupts the speaker but all sit silent and attentive as if engaged in an act of devotion. The speeches are delivered in a pleasing manner and the words of the speakers flow as readily as if they were read from a manuscript. Whoever visits such an assembly, whether white man or savage Indian, cannot but be profoundly impressed. . . .

. . . When all have spoken, one of them is called upon to sum up the principal parts of all the speeches in a concise manner. This is done extempore and the necessary amendments proposed, every subject being brought into as short and comprehensive statement as possible. . . .

. . . Another of his [the chief's] duties is that of keeping the people together and preventing any unnecessary dispersion. Much depends, therefore, on whether a chief is beloved of his people. Where this is lacking the Indians are like a swarm of bees without a queen bee. A chief must prevent all disorders in his town, have an eye to justice, and seek to do away with strife with the aid of his counsellors. But he may not seek to do this by force or severity but only by calm reasoning and friendly exhortation. Usually, the Indians are amenable to good words. In a general way the Indians pay due honor and respect to their chiefs, though there are some who are moved neither by fear of men nor of God; fortunately there are few such.⁹

It is probable that a review of tribal government in all parts of the primitive world would suggest that such practices may be grouped under regional types, but no one has as yet made such an exhaustive survey of primitive governments. However, a few brief statements may be feasible. In New Guinea, for

⁹ A. B. Hulbert and W. N. Schwarze, *David Zeisberger's History of the Northern American Indians* (Ohio State Archæological and Historical Society, 1910), 95-99.

example, there seems to be no tribal council, at least no formal assembly, and the leader of the group has no authority except what is accorded him. The prestige of this head man, however, seems somewhat dependent upon his wealth, but, all in all, the tribes of New Guinea present the approximate minimum of political organization. The remainder of Melanesia, while apparently not so crude, follows this same simple pattern. Australia, on the other hand, though regarded as the home of crude cultures, is somewhat more systematic, the control usually being vested in a group of elderly men who are frequently initiated into a secret cult, and all their deliberations kept to themselves.

In Polynesia we find far more elaborate systems. Some of the Islands were, at the time of discovery, organized under a central government, and in most of them appear different degrees of social rank, as nobility, middle class, and slaves. For the most part, the nobility furnished the chiefs and council men, the latter being the head men of the organized village groups, the primary units in the system. Africa, also, is conspicuous for political organization, usually the work of military despots, who, like the more civilized nations of the Old World, maintain standing armies to enforce their rule and to extend their dominions.

In the New World, the Spanish conquerors found three well-organized native governments, the Aztec of Mexico, the Inca of Peru, and the Chibcha of Colombia. Here, the units of organization seem to have been family groups; these were federated in provinces, etc., the head men of each group sitting in the council of the next higher group. The supreme government, however, was hereditary in a single family group, the original conquerors, from which body the head chief, or king, was selected. In the main, the rule of such a family group was arbitrary and complete, as in Peru where every person worked under official control, all agriculture, industry, etc., being nationalized. As in Africa, standing armies were maintained. Beyond the bounds of these barbarian nations, tribal governments varied greatly, all of them were far less compactly organized, some falling to the level of those in New Guinea. The view we get, then, is a wide range of complexity in the governing machinery of groups, the federation of elementary com-

munities into larger and larger systems, but the main dynamic factor seems to be control by a leader and his advisors.

SUMMARY

We have reviewed the general characteristics of a tribe, examined its internal structure, and come to see how new tribes may arise at any time. While a definition may be framed, recognizing the tribe as the elemental political unit, it should not be overlooked that there are throughout varying degrees of integration among communities or bands which function as parts of wholes and these, in turn, as parts of still larger wholes. It is in this light that the suggested terminology should be followed. By looking upon the band, tribe, federation, etc., as determined by the attitudes of their respective members, we hoped to open the way to an insight into the function of the tribal group and an intimate view of the psychology of the situation. Particularly do we find the control of the group expressed in formal procedure and everywhere dependent upon leadership and spontaneous following. With this survey of the general group background in mind, we shall next see what anthropologists mean by social organization.

CHAPTER VIII

DUAL DIVISION AND EXOGAMY

We have reviewed at some length the rôle of communities as the elemental culture units and their place in tribal organizations. The tendency is for these units to become rigid and definite as the tribal organization increases in complexity. These units, recognized in anthropological literature as of different types, as bands, clans, gentes, etc., are examples of one form of segregation within the tribe, a kind of social cleavage readily observed and easily explained; but there are other types of cleavage in human groups, some easily elucidated, others extremely baffling.

Sex is one of the most obvious lines of cleavage, so matter of course, that it is frequently overlooked as of no particular significance, except as a biological necessity. Sex is a biological objective fact which, man being what he is, cannot be ignored. This objective character automatically divides the members of the tribe into two approximately equal classes. The universal response of the adult tribe member to the objective anatomical distinctions of sex and their behavior concomitants is to recognize the sex line of cleavage. As far as one can see, all living primitives rationalize, sometimes deeply; hence, we may expect that this sex distinction will receive its share of attention. Menstruation and birth are two ever-recurrent biological events that serve to intensify sex distinctions, and both are associated with a number of culture traits seriously studied by anthropologists.

Yet sex is not the only line of cleavage in the tribe. The individual is born, matures, functions, declines, and dies. Hence, there are obvious age differences. We reckon ages accurately in terms of our calendar, something quite beyond the experience of primitive man; nevertheless, relative age distinctions are always observable. The baby erupts teeth, begins to

talk and to walk, ceases to depend on the mother for food, reaches adult stature, matures sexually, and finally the signs of old age become evident. Yet, primitive tribes have rationalized their observations as to age and set up age classes, which vary from such categories as children, youths, adults, old people, to more precise distinctions. Obviously gross distinctions of this kind are so objective that they cannot be ignored because the individual's participation in the life of the tribe will differ according to his age class; the old will have more experience in all phases of life and more knowledge of tradition and tribal procedure; middle-aged men will be the hunters and fighters; the middle-aged women, the mothers and producers, etc. It is differences in the functioning of these age groups that give the classification its objective characters, for organically, the responses of the tribe members are conditioned by age, just as they are by sex. Again, we may note the bond between mother and child, a relationship which even the most miserable tribe recognizes and to which we may add the varying degrees of recognition of the father.

We have dwelt upon these lines of cleavage because they are not only fundamental but universal in human groups. We note that a distinction like sex is basic and that certain functions such as bearing and nursing children are the special responses of one sex, in contrast to the other. Further, in dealing with a tribal culture, the anthropologist notes a long array of duties assigned to one sex. Woman's work, so sharply set off in primitive life, is always given a prominent place in the literature of the social sciences, and hundreds of pages have been written to prove or disprove that anything organic determines such sex distinctions in labor as cooking food, house-keeping, hunting, fighting, etc. On the whole, however, the data of anthropology favor the feminist view that woman is capable of doing any kind of work the group wills. It is true that women are rarely found active in hunting and in war, and just as rarely do the men prepare the food. So child bearing must be recognized as a biological determiner in certain group activities. It may still be an open question as to whether the excess of muscular strength on the part of males is a biological factor of sufficient weight to operate as a determiner in differ-

entiating the sexes in such activities as hunting and war. On the other hand, it is clear that most types of behavior, etiquette, dress, occupation, etc., peculiar to women are in the nature of secondary, or arbitrary associations. The tribal group succeeds because it is composed of cooperating individuals who inevitably fall into groups which cross-section each other. With such an ever-present clear-cut sex grouping, it is reasonable that many diversifications of work, manner, etc., will fall to one sex in distinction from the other, and in so far as there are no factors affecting the freedom of such associations, they will take form according to the culture setting of the time. It is clear that in some instances there are determinants, for, when we turn to age distinctions, immaturity on the one hand, and approaching senility on the other, limit the social function of the individual. Again, we have no knowledge of a tribe in which children and youths are the councilors and the executives.

We have not exhausted the varieties of groupings in tribe members, but have touched only upon what seem to be the more natural segregations, those in which the operation of some form and degree of determinism seems most likely. Of course, such a factor may operate in others that seem less natural, in marriage, for example. Yet, some students of the subject assume that this is also natural, that left to nature, monogamous unions would be the rule and that other forms of marriage are mere social conventions. On the other hand, some assume that all marriage is a social convention, as opposed to an assumed natural state of promiscuity. This dispute may never be adjusted for want of data. However, marriage is universal, and is the keystone to a complicated series of culture traits, though it is probably not so fundamental and vital as some modern writers would have us believe. The important matter to us at this moment is that it produces another sub-classification in the tribe, that of the married and the unmarried. If one asks what is the primary function of the married class, the best answer seems to be that the wedded pair is a cooperating unit to support and rear children. But, in addition to this, almost wherever we look, in primitive life we see other responsibilities laid upon this class; the men form the principal line of defense and offense, the women are the chief producing units, etc.

Certain qualifications are frequently formulated by the married people of the tribe, usually by the men for men, as requisites for entering into their class through marriage. These are but illustrations of how in the differentiation of tribal functions, we find the recognition of existing deep-seated classifications, instead of the setting up of new classes. Such a condition is not only simpler, but far more practical, because the more objective the primary classification, the more readily can the members of a primitive group comprehend the system.

DUAL DIVISION

Our attention so far has been given to such cleavages in the tribe as could be explained in objective terms, but there are other widespread types of segregation within the tribe not so readily interpreted. One of the most intriguing of these is the dual division. Thus, it has been observed that many primitive tribes recognize two classes, the number of men, women, and children in each being about equal. In the older literature these halves of the tribe were called *phratries* and later *moieties*, but they are now usually designated by the simpler term, dual division. When such a dual division exists, the two divisions have specific names. For example, among the Sauk and Fox Indians, whose survivors now live in Iowa, we find such a dual division; at birth each child is assigned to a division, which affiliation is for life. These two divisions, or parties, seem to function in competitive games, the players from one division contesting with a team from the other. Something like this seems to have existed among a number of other Indian tribes and also among the Western Eskimo. Some of the Iroquois, first studied by Morgan, recognized the dual division to which he gave the name, phratry, but in this case one became a member automatically by birth, and such is the rule wherever dual division exists, the cases cited above being exceptional.

As we review the tribes of the world, we observe many and various distinctions in the duties of division members and the parts they play in tribal life. In Australia and certain adjacent islands, marriage rarely takes place within one's own division, but a man or woman must always seek a mate from the other

half of the tribe. The discovery of this custom strongly impressed McLennan and others of his time as the primary function of the dual division. They made the assumption that primitive society recognized the evils of inbreeding and in response to this situation evolved a series of customs to prevent the marriage of blood relatives. This idea is still considered favorably by many writers on social organization, possibly because they can see no other rational explanation for the existence of such divisions. In this inability to find a satisfying explanation may lie the lure of the dual division. Rivers saw in it the basic elemental division of society and so assumed that it was once universal and that wherever now present, it is a direct survival of the original primitive condition. This view of Rivers is often rejected by anthropologists on the ground that there is no way of proving that each living tribe once had a dual division. This, however, overlooks the fact that tribes are still forming in some of the out-of-the-way corners of the earth and doubtless have been for ages, in which case they are like rather than different from parent; hence, it would only be in tribes where the original dual form has passed down unchanged that it would be encountered. Proof in either case seems impossible. On the other hand, there may be some factor in human behavior that makes for the dual division when conditions are favorable, and so its appearance with respect to the time and place might be accidental; but once established in a tribe, might well be stabilized by associating with it a few important social functions, for example, the regulation of marriage. This is pure speculation. In any case, the basic significance given to the dual division by a number of social students seems to us not fully warranted, but it does seem that we are justified in regarding the dual division as important whenever and wherever it is associated with marriage and equally fundamental social functions. Certainly the evidence, so far, does not warrant the conclusion that the setting up of the dual division was a response to fear of incest, as some authors propose.

We began by calling attention to the arbitrariness of such tribal distinctions and in this connection it is well to note another difference between these and distinctions such as sex. Sex

and age classes in their basic forms are found all over the world; they are always present in some form. It is otherwise with the dual division; it occurs in spots, and a world list of tribes would record a large number of absences. Also, we are dealing with a feature of tribal organization that seems much more a mere matter of folk-caprice, than those so far considered.

THE SIBS

When discussing simple natural bands as units in tribal organization, we mentioned the tendency for these to take on other functions. Usually, when dual division exists in the tribe these units are grouped accordingly, so that all members of a given unit will belong to the same division. Further, we noted that what were bands among the simpler folk corresponded to ancestral classes in more highly organized tribes. To such, the name, *sib*, is now given by anthropologists. Morgan called them *gentes*; other writers, particularly the English, used the term, *clans*, while the American school used both, as previously stated. These divisions are considered of great theoretical importance and find a large place in theories of marriage, ceremonialism, and even of government. They are also regarded as part of the totemic system, a topic to be considered later. Among many American Indians and in Australia, these sibs have animal and occasionally plant names, a peculiarity considered of special significance in totemism. It does seem strange, that in contrast to other names, the designations for these groups should be so narrowly chosen, but we are now concerned only with the structure of these groups and their relation to one another. It was soon found that the sibs of some tribes were reckoned in the line of the mother, others in the line of the father, and, for convenience, the term *clan* was applied to the former and *gens* to the latter. Thus, if we read that the Zuñi Indians have a system of clans, we know that they are subdivided into sibs according to their mother's affiliation. If the name for one of these sibs should be *Eagle*, then all the children of an Eagle woman would automatically be classed as Eagle, and subsequently, the children of all her

daughters would be Eagle, and so on. On the other hand, in a tribal system in which the children followed the father, these subdivisions would be called gentes.

Morgan believed such tribal divisions to be the original human groups and conceived the tribe to be a later step in the evolution of modern society. The reasons for doubting this are various; while it is true that a band, when large enough, can maintain all aspects of a culture, it is so clearly a subdivision and subordinate in vital matters, that its most natural origin would appear to be as a segregation within the tribe. However, we are now concerned with the subdivisions and the functions of a tribe as such, and in this respect Morgan was fully justified in placing great emphasis upon the basis of classification giving us sibs. The sib is a line of kinship reckoned through a single parent to the exclusion of the other. Adopting such a system of relationship, there are two simple ways in which individuals could be automatically assigned to a sib at birth,—either through the mother or the mother's husband. Assuming that in the Zuñi tribe, as referred to above, an Eagle woman marries a Badger man, and that the children are born into the clan, then the children would be Eagle. If inheritance were through the father, or gentile, as we say, then the children would be Badger. Thus the alternatives are clear. The operation of either rule—inheritance through the mother or through the mother's husband—would automatically sustain the system in the tribe. This will become clearer as this study advances, but to round out the picture, let us fix our attention upon the Zuñi, among whom there is a clan system, or classification through the mother. Among the Zuñi one's father is not a true member of the family in the European sense; he is little more than a guest in the house. His responsibility to the children is far more remote than that of the mother, and this distinction is reflected in the kinship terms of the tribe. On the other hand, the mother's brother is regarded as the male in whom responsibility for the child is vested. This example may serve as an illustration of how customs respecting the classification of relatives tend to be reflected in the nomenclature for relationships; at least we need not be surprised to find that frequently

the terms of relationship are not the same for the two parental lines, and are more complete in the parental line through which the classification is made.

As may now be inferred, Morgan was not the only one to attach great significance to sib phenomena. Clans and gentes, under their various names, have so engaged writers from the time of Sir Henry Maine to our own day that the literature is abundant, though most of it is theoretical and controversial. So ardent has been the study of the sib, that new students often feel as if the subject were one for speculation rather than objective research. On the other hand, with the field data now available, we can approach openly and directly the question as to how these sibs function in the tribe and leave the subject of their origin to students of the old school.

EXOGAMY

The discovery of the dual division of tribal society led us to the observation that these divisions frequently regulated marriage, i.e., persons belonging to the same division could not marry, such marriages being classed as incestuous, to use our own term. The law of our land defines incest and in many cases drastic punishment is obligatory in the statutes governing the actions of the courts in such cases. Particularly abhorred in our society are the unions of brothers and sisters and parents and children, but, as one moves up or down in the line of relationship, repugnance weakens and public feeling is frequently indifferent to the marriage of cousins, etc. Further, when we survey the literature of social anthropology we find that all primitive peoples show deep disgust over the marriage of brothers and sisters. It is also repugnant for mother to marry son and little less so with respect to father and daughter. Again, the marriage of uncles and aunts to nieces and nephews is generally denied. There are exceptions to these in the literature, but so far as is now known such marriages are restricted to a few individuals and are nowhere the rule for the tribe or the nation.

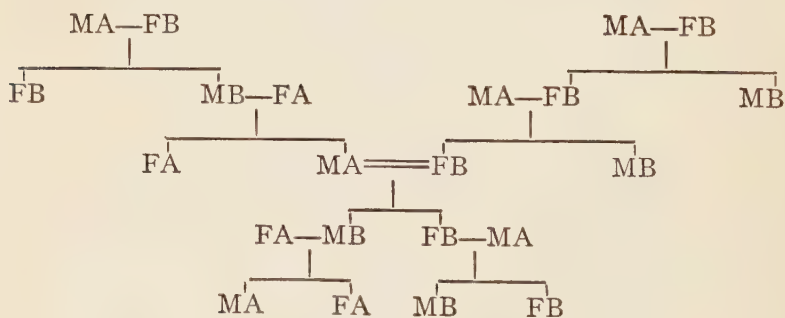
This suggests that aversion to incest is fundamental, since it is universally condemned in all types of culture. Many

students of the subject have assumed this aversion to be instinctive, supporting their views by references to such fragmentary data from primates as suited their purpose. Yet, so far as we can see, the only facts sufficiently well established to serve as a starting point are that anti-incest responses of some kind are universal among mankind. As to why these are universal, we are no nearer a solution than before. There is nothing impossible in the idea that incest is merely a convention; the use of fire, for example, is universal, but no one claims it as instinctive. But turning from theories of origin to the incest aversion response itself, it seems safe to assume that once such a response were made, the experience would be rationalized to the end that objective classifications of individuals would be set up to define incest clearly. Respecting any individual, the question would be, does he or she belong to the incest group. As we have noted, more often than not, the line of cleavage in the group is the dual division. As we see it, a ready solution of the incest classification problem would be the adoption of the dual division as defining incest. This solution would appear so eminently practical that some authors appear to believe that the dual division and sibs were created as a means of avoiding incest, or are a formalization of incest avoidance in the narrow sense, in which case dual division, clans, and gentes would be based primarily upon the incest response. On the other hand, it seems equally possible that these divisions of the tribe came about in another way, and that incestuous associations with them are secondary. Present-day writers are inclined to assign great probability to the second alternative and for that reason we shall speak of the latter as the more probable, for in any event we deal with associations between recognized tribal divisions and incest. Further, it is more important to know how these divisions work in the social group than it is to speculate on their origin. To this end, if one generalize a little, their simplest mode of operation may be shown in a hypothetical case. The diagram represents the two primary distinctions, sex and dual division, which, when combined, divide the living members of the tribe into four classes, FA and FB, females, and MA and MB, males.

Sex		
FA	MA	A Division
FB	MB	B Division

Now, assume the marriage rule to be that one of the pair must be from Division A, the other from Division B. But, in order to perpetuate the scheme, there must be an approximately alternate assignment of children to class A and B. This may be done at each birth by the fiat of some constituted authority, but usually it operates automatically, the principle being that the child belongs to the division of either parent. Here, there are two choices: the rule may be that the children inherit their place in the division through the mother, or, through the father. The peculiarity of the actual phenomenon is that almost invariably it is one or the other, all the divisions of the tribe conforming to the same regulation. It would be possible to divide the children according to sex, or order of birth, but that is practically never done, and would, in any case, obstruct the scheme.

So, bearing the rules in mind and taking first the system of inheritance through the mother, MA would marry FB, etc., and the children would belong to B. A clearer picture of this will evolve if we construct a partial family tree, using the usual



genealogical diagram. The figure represents a married pair and two generations in each direction, practically the life span of a living group of relatives. The first striking peculiarity is that the father's and the mother's lines are different; however,

if the inheritance were through the father instead of through the mother, the form of the diagram would not be changed, but only the sub-letters alternated. To translate this into our own social order, it is as if all the Smiths married Browns or the reverse.

Suppose we see how the rule concerning marriage would operate in this group; if only A can marry B, then,

Mother could not marry:

son

brother

her sister's son

her daughter's son

her mother's brother

her grandmother's brother.

Mother could marry:

father and grandfather

son's son

her brother's son

her father's brother, but not his son

her husband's sister's son, but not his brother's son.

The reader can carry this out to its ultimate limits for either parent. It is clear that though the mother is barred from sex contact with her sons, the father is not barred from his daughters. On the other hand, the father may not marry his son's wife, but the mother may be free with her daughter's husband, as well as with her own father. The primary distinction is, however, that in no case may brothers and sisters marry, or what amounts to the same thing, all children of the mother in this case, belong to clan B, within which clan intermarriage is prohibited.

It does not follow, of course, that a tribe having these rules of marriage will not have other rules preventing the parent from marrying the child, in fact such is usually the case, but the possibilities of incest we have enumerated are often reflected in the kinship terminologies, as we shall see later.

The foregoing is about the simplest conceivable form of division into what are called exogamic classes. If for some reason dual division A and B should separate into two subdivisions, and then rule that A_1 should marry B_1 and A_2 marry

B₂, the situation would be more complicated. Drawing a diagram similar to the preceding and ruling that inheritance should proceed in the line of the mother, then marriage would result as follows:

<i>Father</i>	<i>Mother</i>	<i>Children</i>
A ₁	B ₁	B ₁
A ₂	B ₂	B ₂
B ₁	A ₁	A ₁
B ₂	A ₂	A ₂

Following out this principle of division, the next step would be to subdivide again, giving eight classes between pairs of which marriage was permitted.

So far we have dealt with a hypothetical scheme, which serves to illustrate the principle, but, as may be expected, specific tribes show some variations. Morgan presents the usage of the Iroquois in full and since the Iroquois were a federation of six tribes we may take one of them, the Seneca, as the type. Here we observe the usual two exogamous divisions, with four named subdivisions in each:

FIRST DIVISION

- | | | | |
|---------|---------|-----------|-----------|
| 1. Bear | 2. Wolf | 3. Beaver | 4. Turtle |
|---------|---------|-----------|-----------|

SECOND DIVISION

- | | | | |
|---------|----------|----------|---------|
| 5. Deer | 6. Snipe | 7. Heron | 8. Hawk |
|---------|----------|----------|---------|

Morgan called these subdivisions gentes, but according to modern usage they are clans, i.e., the children follow the mother. To quote:

. . . Originally marriage was not allowed between the members of the same phratry [division]; but the members of either could marry into any gens of the other. This prohibition tends to show that the gentes of each phratry were subdivisions of an original gens, and therefore the prohibition against marrying into a person's own gens had followed to its subdivisions. This restriction, however, was long since removed, except with respect to the gens of the individual.¹

¹ Lewis H. Morgan, *Ancient Society* (New York, 1878), 90-91.

So a child born of a Seneca mother automatically became a member of her subdivision. Thus, if a Bear woman married a Deer man, her children were Bear; in fact, all her children, regardless of their fatherhood, were members of the Bear clan. So the picture for the Seneca suggests the breaking down of an older system in which there were four exogamous subdivisions of the dual division of the tribe, similar to the theoretical scheme outlined above. As to the social functions of the dual division, we are told:

The phratry among the Iroquois was partly for social and partly for religious objects. Its functions and uses can be best shown by practical illustrations. We begin with the lowest, with games, which were of common occurrence at tribal and confederate councils. In the ball game, for example, among the Senecas, they play by phratries, one against the other; and they bet against each other upon the results of the game.²

Further, each division had a tribal council which dealt with all difficulties between individuals of opposite divisions, as murder, theft, etc. Also, when a distinguished person died, the members of his division took the rôle of mourners while the opposite division conducted the funeral.

In some respects the several clans of the Seneca were so many maternal families. Each clan tended to camp apart, married women remained in their maternal homes and their husbands, always of another clan, came to live with them. As they lived originally in communal houses and the clans were never very large, we need not be surprised to learn that there was a tendency among the women of a clan to consider themselves related. These women also had some voice in the clan council, which their husbands, being outsiders, did not attend; on the other hand, their brothers came from the camps of their own wives and dominated the council. In many respects the mother's brother took the place of the father in the discipline and education of his sister's children. This stands out in sharp contrast to our own procedure in which succession is in the line of the father.

² Lewis H. Morgan, *Houses and House-Life of the American Aborigines* (U. S. Geographical and Geological Survey of the Rocky Mountain Region, Contributions to North American Ethnology, vol. 4, Washington, 1881), 11.

Turning now to the Pacific Coast of America we find an interesting people on Queen Charlotte Islands, known as the Haida.

The Haida until recently lived in many villages which were grouped according to location as west coast, and east coast, as well as south and north. Notwithstanding this geographical grouping, and quite regardless of it, all the Haida are divided into two parts; one called Ravens and the other Eagles. This division runs right through the tribe, because it runs also through every family. If the husband is a Raven his wife and children are Eagles. If he is an Eagle his wife and children are Ravens. Since, as has been said above, such social grouping is a well-recognized and widely distributed phenomenon, there is no reason to look for an origin of such groups in geographical distribution, or migration. The two essentials of such groups have been mentioned above; namely, descent in one line only, and an imputed relationship preventing marriage. In addition there may be religious, social, and political distinctions as well. Among the Haida the rank, names, ceremonial duties and properties, fishing rights, and house of a man must remain in his own clan. Since his children belong to the opposite clan, he chooses for his heir a nephew, his sister's son; and in order that the nephew shall become familiar with the duties and properties he is to inherit, he comes to live with his uncle as soon as he is old enough to leave his mother. In case of violent quarrels between the two clans a man's wife and sons adhere to their own clan and align themselves with his enemies, to whom they may even be expected to betray him.

The ceremonial connection of the clans among the Haida is with burial and the accompanying rites. The preparation of the body and its burial is done by the father's family who are members of the opposite clan, which is recompensed by a potlatch. There are no direct political functions of the clan since these pertain rather to the various "families" or septs.³

Australian tribes have furnished most of the data used in general discussions of exogamy, the best known sources being the work of Spencer and Gillen on the Arunta. In this tribe, descent is counted in the male line in contrast to the tribal systems so far described. Here again we find the dual division and four subdivisions. To quote:

³ Pliny Earle Goddard, *Indians of the Northwest Coast* (Handbook Series No. 10, American Museum of Natural History, New York, 1924), 94-95.

In regard to the organisation of the Arunta tribe, with which we shall now deal in detail, it may at the outset be mentioned that the existence of four sub-classes in the southern part of the tribe, and of eight in the northern, appears at first sight to indicate that in the latter the organisation is more complex. In reality, though without having distinct names applied to them, each one of the four sub-classes met with in the south is actually divided into two. The four are Panunga and Bulthara, Purula and Kumara; the first two forming one moiety of the tribe, and the latter two forming another. In camp, for example, the Panunga and Bulthara always camp together separated from the Purula and Kumara by some natural feature such as a creek. The Panunga and Bulthara speak of themselves as *Nakrakia*, and of the Purula and Kumara as *Mulyanuka*—the terms being reciprocal.

The marriage system is, in broad outline, omitting at present certain details which will be referred to shortly, as follows. A Bulthara man marries a Kumara woman and their children are Panunga; a Purula man marries a Panunga woman and their children are Kumara; a Panunga man marries a Purula woman and their children are Bulthara; a Kumara man marries a Bulthara woman and their children are Purula.⁴

It appears, however, that each of these four subdivisions is divided: thus, when a man wishes to marry a Purula woman, he is confronted with the fact that

the Purula women are divided into two groups the members of one of whom stand to him in the relationship of *Unawa* whom he may marry, while the members of the other stand in the relationship of *Unkulla* whom he may not marry. This fact is one of very considerable importance. Each of the four sub-classes is thus divided into two, the members of which stand respectively in the relationship of *Ipmunna* to each other.⁵

For a full understanding of this complicated system the reader is referred to the original, but if he reduces these abstract statements to diagrams, it will appear that here is another variety of the system in which exogamy, dual division, and gentile subdivision operate in the same general way as in the

⁴ Baldwin Spencer and F. J. Gillen, *The Native Tribes of Central Australia* (London, 1899), 70.

⁵ *Ibid.*, 71.

theoretical scheme presented at the beginning of this section. This system is not, however, so complex and arbitrary as it seems, since A. R. Brown shows that in practice, it is not so much these relationship classes that govern marriage, as a principle of definite assumed blood relationship. Thus:

In all tribes a man may only marry women who stand to him in a certain relation of consanguinity. There are two different forms of marriage law, which I propose to speak of as Type I and Type II. . . . In tribes with a marriage law of Type I, a man marries the daughter of his mother's brother, or some woman who stands to him in an equivalent relation. Where the marriage law is of Type II, a man marries his mother's mother's brother's daughter's daughter, or some woman who stands to him in an equivalent relation.⁶

If this rule were strictly adhered to, marriage would be narrowly restricted to cousins, a form observed in many parts of the world. While it is a marriage of the children of cousins, generation after generation, it automatically avoids such incestuous marriages as a man marrying his mother, sister, or daughter. If, however, a man were permitted to marry freely in accordance with the four class system previously enumerated (Brown's Type I), he would not only be barred from marrying his mother, sister, and daughter, but also his brother's daughter, mother's sister, father's sister, mother's mother, son's wife, son's wife's sister, son-in-law's sister, etc. This can be verified by constructing a genealogical table. On the other hand, some peculiar marriages would be proper, as to his daughter's daughter, father's mother, brother's wife, brother's daughter's daughter, etc. The four class system would require that he marry on his own generation level, or the second above or below, skipping a generation in either case.

However, the eight class system restricts marriage even more, because theoretically a man must either marry on his own generation level, or usually skip two, one exception being that he could marry his father's mother. Aside from this exception, there seems no relative one can marry nearer than cousins of

⁶ A. R. Brown, "Three Tribes of Western Australia" (*Journal of the Royal Anthropological Institute of Great Britain and Ireland*, vol. 43, 143-194, London, 1913), 190-191.

the third order; altogether this is a better system than that of four classes, if it is desired to prevent the marriage of near kin.

FAMILY

In basic discussions of society, it is customary to give special consideration to the family, the usual definition of which is a household in which lives a father, a mother, and their children. For biological purposes, this definition may suffice, but since the father and the mother are also children of frequently surviving parents who may have brothers and sisters, concerning whom social customs prescribe specific responsibilities, as a social unit the family may well include a fringe of relatives. From this point of view, any definition may be arbitrary: thus, one may say that a family is a group of living persons regarding themselves as relatives. The emphasis in this case is placed upon the "regarding" in contrast to true biological relationship. On the other hand, it is feasible when studying a tribe, to make genealogical tables which include all the living members and, assuming that the data are reliable, to check out family groups, according to the definition one chooses. If, however, the reader tries this with his own family, he will find it necessary to take an individual couple—father and mother—as the point of departure, because some of the relatives in the family tree will also be members of another series of descendants. Or, to put the matter in another way, when a couple marries, they join two groups of relatives, and their children are relatives of certain members of each group. All this is familiar to us because we live under a social system in which these relationships are clearly defined and concerning which laws are in operation to control the inheritance of property, the exercise of discipline, etc. And further, reflection upon the phenomenon may suggest that an exact definition may be of no importance in such investigations as anthropologists make.

The anthropological unit is the tribe, for the most part, a self-determined social unit. Whatever subdivisions or classification of individuals it recognizes may be accepted by us as the functioning parts of that tribe. If there were no uniformity in such tribal classification, the subject would scarcely find a place

in this discussion, but the contrary is true. No people have so far been discovered, no matter how primitive, who do not formalize marriage and maintain systems of classification for relatives recognizing two lines of relationship, through the mother and father, respectively. So if all peoples function in this way—recognizing the bilateral nature of the family—then we may safely say that here is one of the elemental factors in the social structure. On the other hand, the concept of a tribe seems almost equally universal, presumably because it is seldom found that a camp or village is composed of a single family group and, even if it is, its members regard themselves as belonging to a tribal group from which they are temporarily separated. Or, to regard them from another angle, we see that the individual in the family may readily belong to several different tribal classes, which, taken separately, present a number of distinct relations to the tribe, ties that draw him away from, rather than into, the family group.

In all attempts to deal with anthropological data on the family our task is rendered difficult by the emphasis placed upon the family in our own culture. We hear repeatedly that the family is the basis of the whole structure, economic, ethical, moral, religious, etc. We are so accustomed to think of the whole as an aggregation of standardized homes in which live a man, a woman, and their children, that we attempt to visualize a tribe in the same way. Morgan seems to have sensed a difference between the Iroquoian system and that of his own people. The "long house" of that tribe housed a group of women who looked upon themselves as a family; their husbands were not looked upon as the heads of so many family groups. It was in such contrasts between the Iroquois system and that of his own people that Morgan found the lead to his investigations. In social anthropology it seems best to take as the point of departure the sex-pair and their children. This is an objective relation, ever present and recognizable. In its simplest form the community would be a group of such sex-pairs with their offspring. In our own society we assume that the husband is the biological father of his wife's children, but among primitive tribes the biological relation of the father to the child is less clearly conceived. On the other hand, the relation of

the child to the mother is definite and universally recognized. So it is to be expected that the relation of mothers and children is universally recognized and formalized into social conventions. Further, though the biological relation of the husband to the child is not clearly conceived by many primitive peoples, yet everywhere we observe the binding of the mother to a male, the two jointly supporting her children, lavishing affection on them, etc. The rules of conduct for the individuals comprising these family groups vary widely as we survey the world and so do the secondary associations with these groups. As we have said, birth will automatically place the woman and her child in a group of parent-child relationship, but not the man to an equal degree; in fact, it appears that the tribe makes up for a deficiency here by supplying an objective criterion in the custom of marriage. Everywhere we find the idea that a woman rearing children should live with a man, sanctioned by a standardized ritualistic procedure called marriage. Many suggestions have been made to show that this is essential to the perpetuation of the race, but one may be suspicious of such logical explanations, and this is merely another case where we can state what exists without being able to say just what it is that sets off the responses perpetuating marriage. We have, however, answered the question raised at the outset; the tribe presents a segregation of sex-pairs, seemingly regarding as normal the presence of a resident male during the child-bearing period, actual or potential.

The persistence of this family grouping is seen when a tribe breaks up, for the last to survive is the parental nucleus and its fringe of dependents; these cling together to the very end. One may suspect an organic basis here, probably a biological set, independent of social convention, since a family group appears among mammals and birds.

The old theories accounting for marriage systems and customs were usually based on what was considered a negative condition, an ill-defined tribal horde, or pack, in which promiscuity ran riot. Their authors endeavored to formulate plausible schemes by which the various tribal systems could be evolved out of such a background. The chief difficulty seems to lie in the initial assumption, since the behavior of most animals and

birds rather favors the contrary assumption, i.e., that the parental pair is the original nucleus. It would seem more plausible, then, that tribal marriage systems merely elaborated from this basic biological family. Anyway, we may leave such doubtful matters to those interested and will not stop to harmonize the known facts with any one set of these assumptions. We find, at least, that the primitive family kernel lies in a universal grouping of parents and children and, as in modern life, this has a biological and an economic aspect. The husband, as hunter, herder, farmer, etc., produces food materials; the woman is also a producer, sometimes the sole agriculturist; yet, when it comes to preparing the food for eating, the woman everywhere takes over the task. Some people see in this merely an extension of suckling the child and a continuation of infantile dependence on the mother to and throughout the adult stage. This is probably largely imaginary, but the analogy is simple. We need not enumerate the various ways in which the family pair produce and conserve as units in the tribe; these the reader can glean from the literature.

Morgan was impressed not alone with the economic aspect of the primitive family group but with the part it played as a social unit. As he saw it, not all of the poetic emotion surrounding the fireside is misplaced and his last published work deals with a study of the house life of the American Indians, because he believed that the general types of housing, the internal arrangements and furnishings, were expressions of the social order. Whether he overestimated the value of such data remains to be seen, but this publication will well repay reading, for many of the data it contains are based upon direct observation.

On the other hand, we must not overestimate the self-sufficiency of the primitive family, for the tribe is, after all, the culture unit, the speech unit, etc. The family pair is segregated only with respect to a few activities, and, as we have seen, it is arbitrarily formed by the union of two adults, each of whom has attachments elsewhere. Systems of marriage and incest avoidance require a tribal group in order to function. In anthropology, then, we deal with the family, as a partial segregation within the tribe for special purposes, while in other respects the individuals concerned fall into other groups. This

grouping and re-grouping of tribe members allows for individual specialization and teamwork.

PLACE OF THE MARRIED PAIR

Anthropology attaches some importance to the place in the tribe assigned the married pair and the formal recognition given them. First, attention may be given to their place of residence; the groom may go to live in the family of the bride; the bride may go to the family of the groom; they may live apart from both. As may be anticipated, each tribe has a standardized procedure from which there is little variation. Yet, each procedure tends to be reflected in the life of the tribe. The curious taboo against speaking to one's mother-in-law, or even looking at her face, is believed to hold some relation to the residence of the married pair. Usually, when the groom lives with the parents of his wife, his residence there is temporary, but during the interval he is expected to contribute to the support of the household by hunting or such other means as the tribe sanctions. Some tribes require that all adolescent and adult males spend most of their leisure time in a public house, where their food is sent from the home of the wife or mother, as the case may require. Under such systems the husband sleeps at home, the girl residing with the mother. In some ways this separates the sexes, but that the custom interferes with normal married life is doubtful.

All these practices, however, serve to distinguish tribal cultures from one another rather than to define problems in social science. In range they seem to exhaust the logical possibilities and while some of them may be linked in function, it remains for future investigation to discuss such correlations.

SUMMARY

In the preceding chapter we saw bands as elemental communities, a more or less close federation of which made up a tribe. These communities varied in this relation from mere similarities in speech and mode of life to closely interlocking functions in tribal life. Many students of society consider

them the basic elements of every human society. In this chapter we gave special consideration to the tendency of many tribes to maintain two divisions, and noted that, more often than not, these divisions formed marriage groups, the marrying of a man and a woman in the same division being regarded as incest. Instead of bands, we encounter rigid units into which members are born and within which one may not marry. For these, the name *sibs* has been adopted recently, though they are still often spoken of as *gentes* and *clans*. If the tribe maintains a dual division the *sibs* are apportioned among them. Marriage then becomes more complicated. The *sibs* and dual division seem to regulate marriage automatically and to avoid conventional incest. In many cases, however, other social procedures are limited to the members of one division or to a single *sib*, so there is reason to doubt that marriage restriction is the primary function of these units. Nevertheless, that is the function most frequently associated with them.

CHAPTER IX

RELATIONSHIP SYSTEMS

Morgan seems to have been the first to discover that there were different ways of classifying relatives. As he observed the phenomenon, there were two kinds of relationships recognized in tribal communities: one based upon blood, or parentage; another, upon marriage, or affinity. Anthropologists generally recognize that relationships by blood are also of two kinds, lineal and collateral. "Lineal" relationship means that one individual is descended from another, as son, daughter, grandchild, and, reversing the order, father, mother, grandparents, etc. "Collateral" relatives are the descendants from common ancestors, as, brother, sister, uncle, aunt, niece, nephew, cousin, etc. When, as we noted above, it is the custom of a tribe to count descent through the mother, the matrilineal relatives are the most important, somewhat in contrast to our way of classing relatives. Everywhere, it seems, even the most primitive tribes have set up systems of names for classifying individuals according to their parentage, and the founders of social science may be right in assuming that there was something fundamental to society in this procedure.

Relationship by marriage cross cuts blood relationships, tying one series of relatives into another. Morgan thought it valid to seek, in tribal systems of naming relatives by marriage, the survivals of older schemes out of which the more modern ones grew. As we have said, he assumed the original state of man to be one of promiscuity and naturally, therefore, sought hints of such ill-defined systems of relationship as must have resulted from such a state. However, the probable error in Morgan's theory does not militate against the significance of tribal relationship systems as a necessary part of tribal culture. But to come to an understanding of what it is that Morgan discovered, we may best turn to his account of the Iroquois Indians.

THE IROQUOIS SYSTEM

To comprehend a scheme of designating relationships like that attributed to the Iroquois by Morgan, will sorely try the reader's patience. The most satisfactory method is to work out the various relationships according to the forms used in genealogical tables, for in this way the principles of classification will be comprehended. But at the outset, the point of view of the system should be noted. Apparently the basic aspect of the procedure is to rank individuals according to generations in respect to the speaker. Assuming that the speaker is the fourth or fifth child in a family of ten, he may then classify his brothers and sisters as older and younger, thus counting backward and forward from himself as the zero point. In a diagram, these generation levels might stand thus:

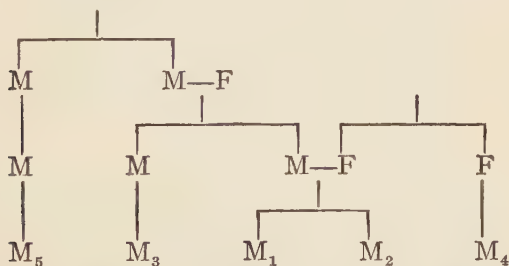
- 4 great grandparents
- 3 grandparents
- 2 parents
- 1 older brother and sister
- 0 self
- 1 younger brother and sister
- + 2 children
- 3 grandchildren
- 4 great grandchildren

With this scheme in mind, one can place his relatives on their proper generation levels; thus uncle and aunt would fall at — 2, while nephew and niece would belong in + 2. It so happens that the Iroquois have carried this principle to great length, designating the generation levels by name instead of numerals. Thus, if the reader consult Morgan's table of names, he will note that the same term is used for paternal uncle as for father. Naturally, this sounds absurd to us, as it did to Morgan, but it seems that the Indian means by this, in part, that uncle and father belong to the same generation. In the same way, one might expect the brother of the speaker's mother to be included; but this is not the Iroquois rule, though the mother's sister is called mother. This curious exception will be considered later; it is mentioned here to call attention to the lack of consistency in this scheme, or, perhaps one should say, that only certain

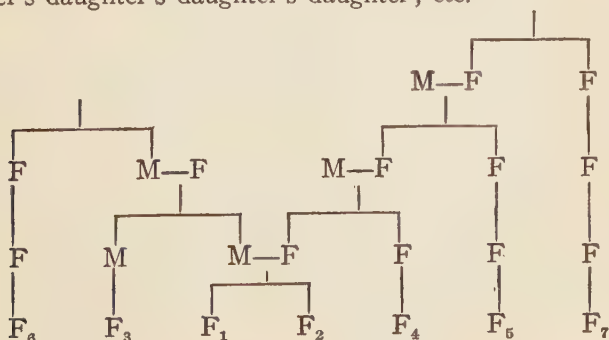
relatives are designated by the general terms for generation classes, while some are singled out for special designation, and still others ignored. Even our own system has some inconsistencies. In Iroquois society the son inherits through his mother, and succeeds not his father, but his maternal uncle; so it is not strange that whereas the same term is applied to mother and mother's sister, there is a special term for mother's brother. Further, there is a tendency among all relatives to distinguish between the male line and the female line of descent.

However, the best introduction to this subject will be an analysis of a few generation levels. Thus in Iroquois, the term *haje* is used for elder brother, and *ahje* for elder sister, but also for the relationships listed below:

haje: (2) elder brother; (3) father's brother's elder son; (4) mother's sister's elder son; (5) father's father's brother's son's son; etc.



ahje: (2) elder sister; (3) father's brother's elder daughter; (4) mother's sister's elder daughter; (5) mother's mother's sister's daughter's elder daughter; (6) father's father's sister's daughter's daughter; (7) mother's mother's mother's sister's daughter's daughter's daughter; etc.



If the reader will check these on a genealogical diagram, he will observe that all are on a single generation level.

The peculiarities of this system are that there is a tendency to take as brothers all of the same generation level that can be traced through a continuous male line. The male descendants of father's sister are ignored. On the other hand, those of the mother's sister are counted in.

In case of the elder sister there is a direct line through the female ancestors of the mother and through the father's lineal male line. There are inconsistencies in Morgan's printed table, but the tendency to reckon according to the sex line is clear, as is also the effort to classify according to the generation level.

The next older generation is represented by father and mother :

Iroquois *hanih*: father ; father's brother ; father's father's brother's son, if older ; etc.

noyeh: mother ; mother's sister ; mother's mother's sister's daughter ; father, father's father's sister's daughter's daughter ; mother, mother's mother's sister's daughter's daughter ; etc.

The same inconsistencies as in the preceding are revealed on the father-mother level. The term, father, seems more restricted than the term, mother, but the intent of the scheme seems to be to recognize certain of the mother's female relatives, through female lines, on the generation level of the mother, as in one class ; and all corresponding male relatives in another. That the generation idea is dominant appears from the fact that all to whom the elder brother or sister term applies must be older than the speaker.

Also, uncle and aunt are on the same generation level as parents, but they are distinguished, in part. Thus, the term for uncle applies to :

mother's brothers ;
 mother's mother's brother's son ;
 mother's mother's mother's brother's son's son.

The term corresponding to our aunt applies to :

father's sister ;
father's father's sister's daughter ;
father's father's father's sister's daughter's daughter.

That these are all on the same generation level with one's parents can be shown by a simple diagram, the first descending through the brother of the successive mothers, the second through the father's sisters.

The case may be clearer, if we reverse and take descending generations from the speaker's level, beginning with younger sister :

Iroquois, *kaga*: younger sister ; father's brother's younger daughter ; mother's sister's younger daughter ; mother's mother's sister's daughter's daughter.

haga: younger brother ; father's brother's younger son ; mother's sister's younger son ; father's father's brother's son's son.

This is fairly consistent in that the sex line is followed to the exclusion of males in the mother's line and females in the father's line.

For the complete table, as compiled by Morgan, see his *Ancient Society*. The construction of genealogical tables will give the reader a clear understanding of the system.

This system is seen at its best, however, when we pass to the parental relation to the child. In this case, distinctions are made as to the sex of the speaker. A woman, for example, uses the same term for her sons, her sister's sons, and for all males on the same generation level, whose mothers were lineal descendants of her father's brothers and sisters on the one hand and her mother's brothers and sisters on the other ; the term does not seem to apply to her brother's sons nor to the brothers and sisters of the father. Again, in the grandparental generation it does not apply to descendants of the father's father's brothers and mother's mother's brothers, thus skipping the male lines in each alternate generation.

A man applies the term to his own sons, his brother's sons, and to all males on the same generation level, whose fathers were lineal descendants of brothers and sisters to his parents

IROQUOIS RELATIONSHIP TERMS (MORGAN)

English: son; Iroquois: *ha ah wuk*, son. (m) brother's son; (f) sister's son.

- (m) father's father's brother's son's son's son.
- (f) father's father's sister's daughter's daughter's son.
- (m) mother's mother's brother's son's son's son.
- (f) mother's mother's sister's daughter's daughter's son.
- (m) father's brother's son's son.
- (f) father's brother's daughter's son.
- (m) father's sister's son's son.
- (f) father's sister's daughter's son.
- (m) mother's brother's son's son.
- (f) mother's brother's daughter's son.
- (m) mother's sister's son's son.
- (f) mother's sister's daughter's son.
- (m) father's father's father's brother's son's son's son's son.
- (f) mother's mother's mother's brother's son's son's son's son.

English: daughter; Iroquois: *ka ah wuk*, daughter.

- (m) brother's daughter.
- (f) sister's daughter.
- (m) father's brother's son's daughter.
- (f) father's brother's daughter's daughter.
- (m) father's sister's son's daughter.
- (f) father's sister's daughter's daughter.
- (m) mother's brother's son's daughter.
- (f) mother's brother's daughter's daughter.
- (m) mother's sister's son's daughter.
- (f) mother's sister's daughter's daughter.
- (m) father's father's brother's son's son's daughter.
- (f) father's father's sister's daughter's daughter's daughter.
- (m) mother's mother's brother's son's son's daughter.
- (f) mother's mother's sister's daughter's son's daughter.

English: cousin; Iroquois: *ah-gare seh*.

- (mf) mother, sister's son and daughter.
- (mf) mother's brother's son and daughter.
- (mf) father's father's sister's daughter's daughter.
- (mf) mother's mother's brother's son's son.
- (m) mother's mother's mother's brother's son's son's son.

English: grandfather; Iroquois: *hoc sote*.

- grand and great grandfather.
- father's father's brother.
- mother's mother's brother.
- father's father's father's brother.
- mother's mother's mother's brother.
- mother's mother's mother's brother's son.

and so on. In this case the females in the grandparental generations are skipped, as are the brothers and sisters of the mothers and the sisters of the father.

A complete presentation of principles of classification employed in the known systems of the primitive world cannot be made here, nor should the reader infer that the generation level is the only basis of such classifications, for it does not account for the somewhat arbitrary selection of a few relatives on the generation level as belonging to a distinct class. There is also a tendency to alternate skipping of collateral relatives that deserves study.

USE OF RELATIONSHIP TERMS

Morgan has called attention to the Iroquois custom of using relationship terms in ordinary conversation to a greater degree than is our custom. We use such terms constantly in speaking to uncles, aunts, parents, and grandparents, but not otherwise. Many Indian tribes seem to have carried the practice much farther. On the other hand, their system of grouping several relatives under a single term is a cruder method than we employ, at least it is far less precise; for example, an Iroquois man may say, *ha-suh-neh*, when we would need to say, father's father's father's sister's daughter's daughter's daughter's daughter. Yet, we would, in this case, have specified a female in a single line of descent, whereas the Iroquois would have named a class covering seven or more possibilities. Should the Iroquois wish to be as specific, he must resort to a descriptive method, far more cumbersome than ours. On the other hand, if we wish to use these terms in address, we would no doubt fall into the same kind of practice and might arrive at the same classification by using our term *niece*. Of course, this is an extreme example, but we address as *uncle*, the husband of an aunt, possibly because an explanatory phrase would be awkward.

The Indian practice that Morgan had in mind, however, was the use of a term of relationship according to the generation of the person addressed. These, as among us, might be extended far beyond the bounds of actual relatives, as when an old Indian may speak of you as grandson, etc. In common

speech an Indian may frequently address an old person as grandfather, grandmother, etc. Among some of the Plains Indians in North America, the personal name is not often used in direct address to him, but a relationship term substituted. Among many other primitive peoples the personal name is used and relationship terms are rarely mentioned, so no hard and fast rule can be laid down.

It has proved peculiarly difficult for European and American scholars to visualize the working of these relationship and marriage systems. In our own communities we have written family records recording relationship and our own marriage laws are based upon assumed exact knowledge of biological relationships. Without written records we could do as our ancestors did, apply a term to the infant expressing his relation to us, and thus "tag" him. These names become terms of address, as father, mother, uncle, etc., but this merely reflects our own culture background, and so does not help us in the least. The chief difficulty seems to lie in that we have ceased to live in small groups or communities, and further, that our system is adjusted to large populations. On the other hand, the primitive group, often polygynous, may consist of no more than fifty individuals, the descendants of two or three living males. It is essentially a family group. If, then, we take into account the custom of marrying out, or of one sex remaining at home, we have the rough outline of the picture. Possibly sex solidarity is heightened by this exogamous tendency, because one sex or the other remains, thereby preserving the continuity of the group life. If the men, for example, take their wives from the nearest neighboring family group, and that group reciprocates, the two groups soon become near kin, for the most part, with the children of brothers in one group, of sisters in the other. The natural thing would be for these to marry; indeed, when we consider the small number of individuals, perhaps two or three coming of age each year, there might often be no other choice. Anyway, cousin marriage is widespread among primitive peoples, and though we cannot yet say how it became so frequent, group exogamy seems especially favorable to it. Again, primitive people are not so particular as to the relative age of the married pair; old men frequently marry girls, boys

marry old women. This is especially true when polygyny is practised. Cousin marriage can, however, be adhered to rather strictly and still permit such disparity of ages in the married pair. It is a practical form of marriage and as such prevents marriages between closer kin.

As previously stated, a system of exogamous classes does not, in itself, prevent incest. A moment's thought will make it clear that while the rule of marrying out of one's sib prevents the union of brothers and sisters, it does not prevent the marriage of parents and children. If the sib of the mother is taken, fathers could marry daughters; if from the father, mothers could marry sons. If, however, group residence is taken into account, such marriages would be prevented. We mention this because it is sometimes overlooked that the mere inheritance of a clan name through the mother, for example, and two reciprocal marriage groups, will not prevent her husband from marrying her daughters. This may help us to appreciate the simplicity and effectiveness of the rule that group A should marry with group B, but that a man should take for his wife the daughter of his mother's brother. The Australian system is confusing because it involves four groups instead of two. Then A marries B and C marries D, but the children of these unions are assigned classes differing from that of either parent. This automatically prevents brother and sister marriage and that of parents and children. The sib name will be a sufficient tag for the individual. The formula to be learned by the group is not complicated; merely that the children of an A mother are C's, of B mother, D's, etc. Even an eight-class system would not heavily tax the memory.

CLASSIFICATORY AND DESCRIPTIVE SYSTEMS

It is the usual statement that Morgan discovered the classificatory system of designating relatives. To follow Rivers:

I do not know of any discovery in the whole range of science which can be more certainly put to the credit of one man than that of the classificatory system of relationship by Lewis Morgan. By this I mean, not merely that he was the first to point out clearly the existence of this mode of denoting relationship, but that it was

he who collected the vast mass of material by which the essential characters of the system were demonstrated, and it was he who was the first to recognise the great theoretical importance of his new discovery.¹

The reader who has followed through the various sections of this chapter should now have the background necessary to a comprehension of the distinctions between classificatory and descriptive systems. We deferred consideration of these for the reason that while everyone agrees that Morgan found something of great significance, many are hostile to his definition, Kroeber, for example, denying that the terms are valid. We may first note that Morgan applied the term *descriptive* to our own system, that common to the peoples of Europe, certain Asiatic peoples of assumed Aryan ancestry, Semitic peoples, and a few others. Classificatory systems were used by the American Indians, Polynesians, Australians, etc. It appeared to him that descriptive systems were to be found among the advanced cultures of the Old World and the classificatory systems among primitive peoples; in this he may have been in error. Reverting to Morgan's definition of the two terms, we may note Professor Dixon's concise convenient statement:

The essential characteristics of the Descriptive type as defined by Morgan, were (1) that the terms express actual blood relationship, our forms such as father, sister, son being applied only to persons having actual blood-kinship with the speaker: (2) that the collateral lines are kept distinct from each other and divergent from the linear, so that the terms nephew and niece, grand-nephew and grand-niece, for example, are applied only to persons related collaterally, the divergence of the successive generations being indicated in the names employed; and (3) that in most cases, except for the nearer relatives, the terms are descriptive, i.e., there is, in what he believed to be the typical and normal forms of the system, no general terms like uncle, niece or cousin, the persons being specifically described as father's-brother, sister's-daughter, mother's-brother's-son. Morgan admitted that in some cases, such as in English for example, some classification or grouping as in the terms uncle or cousin was employed, but he pointed out that the classes made comprised only individuals of the same degree of real

¹ W. H. R. Rivers, *Kinship and Social Organisation* (London, 1914), 4-5.

relationship, and he insisted that where this occurred, we did not have the normal or oldest form of the type.

The Classificatory System, on the other hand, reckons kinship between groups rather than individuals, i.e., the term applied by a man to his father is used not alone for this single individual, but is also employed for all males who might, according to tribal custom, have married the woman who was the speaker's mother. Similarly, the term applied by a man to his sons, is also used by him for the male children of all the women who might have been his wives. . . . Furthermore, under the Classificatory System, collateral lines are not kept distinct and divergent from the lineal, since, for example, the same term is sometimes used for niece and grand-daughter; moreover, no composite, descriptive terms, such as father's sister's son, are in use.²

Our purpose now, however, is to understand the usage of the terms. The statements in themselves are clear enough, but everyone will find some difficulty in classifying a concrete system because, like most social systems, they vary from one another in their details and frequently are inconsistent in part. Nevertheless, there are such things as relationship systems, and Morgan discovered them. Regardless of whether we accept the definition or not, as the illustrations given show, some relationship systems emphasize biological descent, or describe the individual, others emphasize group affiliations, or put the individual into a class as related to another class.

No doubt the reader was struck by the apparent absurdity of the Iroquois system, where no distinction seemed to have been made between one's mother and a number of other women, but his reaction is due to the conditioning effect of his own European culture with its descriptive system. No evidence has yet been brought forward, nor did Morgan claim, that the individual Indian did not know who was his true mother. Yet it is this apparent absurdity that challenged Morgan and has continued to challenge students of society ever since. We all feel that there is some reason for this curious system, that if not a survival, it serves some useful purpose in the life of the tribe. In general, it can be said that the subject of kinship

² Roland B. Dixon, *Some Aspects of the Scientific Work of Lewis Henry Morgan* (Researches and Transactions of the New York State Archaeological Association, vol. 1, no. 3, 9-20, Rochester, 1919), 11-12.

terminology has assumed unusual importance in the literature of social anthropology because these terms were believed to be survivals of a social status when they served a real function. If, for example, it is the custom in a tribe to speak of a sister's children as my sons and daughters, thereby not distinguishing in any way between them and my own, this extraordinary procedure would be suspected to be a hold-over from a social status in which one could have children by marriage with a sister. In case a tribe practises inheritance through the mother, the assumption is not infrequently made that there was a time when it was impossible to determine the identity of the father. According to this idea, methods of designating and classifying relatives are survivals of a social order in which they served a consistent purpose and can, therefore, be taken as indicating the form of marriage at the time the terms were established. This was Morgan's view and underlies his whole theory of marriage as a social development; in recent years, this view was taken by Rivers, in England, and on the basis of this assumption he gave an exhaustive interpretation of the order of development in primitive Melanesian society. As to the justification for this assumption, there is much difference of opinion and naturally a body of controversial literature has resulted to perplex the reader. We may pass over the details of this controversy and attempt to formulate the main points at issue. To quote Rivers again:

The first to take up the cudgels in opposition to Morgan was our own pioneer in the study of the early forms of human society, John Ferguson McLennan. He criticised the views of Morgan severely and often justly, and then pointing out, as was then believed to be the case, that no duties or rights were connected with the relationships of the classificatory system, he concluded that the terms formed merely a code of courtesies and ceremonial addresses for social intercourse. Those who have followed him have usually been content to repeat the conclusion that the classificatory system is nothing more than a body of mutual salutations and terms of address. They have failed to see that it still remains necessary to explain how the terms of the classificatory system came to be used in mutual salutation.³

³ W. H. R. Rivers, *Kinship and Social Organisation* (London, 1914), 6-7.

Like Morgan, Rivers regards classificatory relationship systems as originating in forms of marriage and holds that these may survive after the marriage system changes. He says "the details which distinguish different forms of the classificatory system from one another have been directly determined by the social institutions of those who use the systems" (p. 19). As an illustration, he cites the case of cross-cousin marriage, a curious system of marriage restriction by which a man can marry only a daughter of his mother's brother or his father's sister. In a community having such a system, the daughters of my mother's brothers and father's sisters would constitute a class of potential wives, in contrast to daughters of my father's brothers and my mother's sisters. Naturally, these two classes would be distinguished in name. Again, the relation of a male to his mother's brothers would be as follows:

Before marriage—mother's brother.

After marriage—father of his wife.

An alternative after marriage to father's sister's daughter would be that father's sister's husband becomes the wife's father. Therefore, mother's brother and father's sister's husbands are his potential fathers-in-law. One would expect, then, a single name for all these.

As an instance in real life, Rivers cites the Fiji terms (p. 22):

vungo, mother's brother, husband of father's sister and father-in-law.

nganei, father's sister, mother's brother's wife and mother-in-law.

Now, the cross-cousin system of marriage is operative in Fiji and other instances of this correspondence can be pointed out. Accepting the principle that such a grouping would not occur unless the classification were real and that no other conceivable marriage system would require the same classification, then the origin of this type of nomenclature would lie in the operation of cross-cousin marriage and in no other.

The next step in the method of Rivers is the assumption that when a tribe possesses this nomenclature and does not practise cross-cousin marriage, it follows that it once did so. Thus is set up a method of using relationship terms to determine se-

quences and basic unities in culture. And this is the method used in the studies of Melanesian culture published by Rivers.

Obviously, the value of this method depends, as in all other methodological procedures, upon the uniformity of the phenomenon. In the case of cross-cousin marriage, a practice found in many parts of the world, exceptions have been brought to light, cases in which the system of nomenclature was not consistent with such marriages; so it appears that one does not always make the other inevitable. Yet, as one proceeds by counting tribes, the result becomes statistical and so the validity of the method should be based upon statistical fact. The true test will come, then, when many tribes have been canvassed and the degree of correlation in occurrence determined. Any certain degree of correlation, positive or negative, would indicate something more than a chance relation.

CATEGORIES OF RELATIONSHIP

Morgan accumulated a wealth of concrete data on tribal systems, but there is now available a greater store, large areas in the world having been surveyed in detail. One may, therefore, expect new points of view, in addition to the more fundamental opposing views first voiced by Morgan on the one hand and McLennan on the other. Perhaps the most distinctive contribution was made by Kroeber in a brief paper published in 1909. His method seems to have been a comparative study of tribal systems, as they are found, and while his study is too technical to present here as a whole, we can note its main trend. One of his problems was to formulate the principles according to which known systems of relationship are ordered. These should be discoverable in the vocabularies of the respective tribes, but since there are many different languages in the world, all capable of expressing the same ideas according to individualities of structure and vocabulary, it is conceivable that there are many different ways of expressing the same degrees of relationship. As Professor Kroeber conceives it, the chief categories prevailing in the world are:

1. *The difference between persons of the same and of separate generations.*—The distinctions between father and grandfather, be-

tween uncle and cousin, and between a person and his father, involve the recognition of this category.

2. *The difference between lineal and collateral relationship.*—When the father and the father's brother are distinguished, this category is operative. When only one term is employed for brother and cousin, it is inoperative.

3. *Difference of age within one generation.*—The frequent distinction between the older and the younger brother is an instance. In English this category is not operative.

4. *The sex of the relative.*—This distinction is carried out so consistently by English, the one exception being the foreign word cousin, that the discrimination is likely to appear self-evident. By many people, however, many relationships are not distinguished for sex. Grandfather and grandmother, brother-in-law and sister-in-law, father-in-law and mother-in-law, and even such close relationships as son and daughter, are expressed respectively by single words.

5. *The sex of the speaker.*—Unrepresented in English and most European languages, this category is well known to be of importance in many other languages. The father, mother, brother, sister, and more distant relatives may receive one designation from a man and another from his sister.

6. *The sex of the person through whom relationship exists.*—English does not express this category. In consequence we frequently find it necessary to explain whether an uncle is a father's or a mother's brother, and whether a grandmother is paternal or maternal.

7. *The distinction of blood relatives from connections by marriage.*—While this distinction is commonly expressed by most languages, there are occasional lapses; just as in familiar English speech the father-in-law is often spoken of as father. Not strictly within the domain of relationship, but analogous to the occasional failure to express this category, is the frequent ignoring on the part of primitive people of the difference between actual relatives and fictitious clan or tribal relatives.

8. *The condition of life of the person through whom relationship exists.*—The relationship may be either of blood or by marriage; the person serving as the bond of relationship may be alive or dead, married or no longer married.⁴

⁴ A. L. Kroeber, "Classificatory Systems of Relationship," *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, vol. 39, 77-84, (London, 1909), 78-79.

Professor Kroeber examined a number of Indian languages, counting the number of specific relationship terms expressing each category, compared them with English, and shows that though English recognizes but four categories, each of its terms nevertheless tends to express all four of them: thus, the term brother-in-law, expresses the generation, marriage vs. blood, collateral vs. lineal, and sex. The reader can try out other terms, to assure himself on this point.

On the other hand, it appears that the majority of American Indian languages and many languages of primitive peoples in other parts of the world, recognize the first seven in the list, the last but occasionally. Further, we are told that the number of relationship terms found in Indian languages exceeds those in English but slightly; hence, their terminology must be less concise and less consistent than in English. This is, in fact, the point to his criticism of the distinction between descriptive and classificatory systems; he claims that descriptive means more precise and, as in English, restricted in categories, whereas, classificatory recognizes more categories, but expresses them less efficiently. As he conceives it, then, the purposes to be served are the same in each case and tribal differences are to be explained as matters of psychology rather than sociology. This may be clear, if we take account of the differences in belief and social philosophy motivating Kroeber, on the one hand, and Morgan and Rivers, on the other.

We have remarked how Morgan and Rivers used data on kinship terms to prove the former existence of states of marriage different from those of the present. The assumption is that a classificatory term would not exist, except to serve some purpose, but once established, mere usage will continue the term of classification long after the social condition it represents has ceased to function. This view has been challenged by Kroeber, who denies that such an inference is justifiable because the nomenclature used for designating relatives is merely a matter of language, and the fact that the principles of classification recognized in tribal languages differ, is a peculiarity of linguistics equally applicable to other kinds of classification. He, therefore, calls his explanation a "psychological" as opposed to a "sociological interpretation." According to this view, nothing can be inferred from the particular systems of kinship

terms a tribe uses, and the study of relationship systems can have no interest except to show what curious methods may arise in the primitive world. In his opinion, kinship terminologies are arbitrary and unexplainable by any principle other than accident.

However, no one has ventured to deny that once a terminology is set up and definitely fixed in the language of a tribe, this classification may inhibit the marriage of persons eligible by blood, because by the use of a common term they are arbitrarily classed with the ineligible. What seems to be an instance of this was noted long ago by Andrew Lang in the ban Catholic peoples place upon the marriage of a god-father and a god-daughter, even though they are not in any way related by blood. It may be, as Andrew Lang says, that the terms *father* and *daughter*, even though qualified by a joint term, place the individuals concerned in classes between which marriage is prohibited. Again, few go so far as to deny the improbability of relationship terms arising unless the recognition of the relationship involved served a real need in the group.

However, in this volume we are not greatly concerned with the fundamental philosophies of leading anthropologists, but with the methodological insights achieved, and their practicality in handling data and extending our knowledge. It may well be that Professor Kroeber's basic beliefs are antipodal to those of Morgan and Rivers, but he has contributed to our understanding of relationship systems by showing how a comparative study of tribal systems may be made on the basis of categories.⁵ This seems to be the real contribution here, and it in no way renders the terms descriptive and classificatory obsolete, as is indicated in their current use.

PRESENT STATUS OF RELATIONSHIP SYSTEMS

Since the subject of relationship terms and kinship grouping occupies so large a place in anthropological research, it seems necessary to review the present status of the matter. The history of the case has not been fully worked out, but McLennan, an English contemporary of Morgan, writing voluminously on

⁵ "California Kinship Systems" (*University of California Publications in American Archaeology and Ethnology*, vol. 12, no. 9, 339-396, Berkeley, 1917).

marriage and social grouping, made use of Morgan's material to support his theories of marriage, but rejected the notion that relationship systems were anything more than curious freaks of language and social etiquette. With the passing of Morgan and McLennan, interest in the subject waned until revived by Tylor, who partially agreed with Morgan, claiming that the practice of maintaining exogamous groups and the so-called classificatory systems of relationship were complementary, or two aspects of the same phenomenon. Later on, appeared the classical work of Spencer and Gillen, with a wealth of data on certain primitive Australian tribes. This was followed by increased interest among American anthropologists and eventually a strong revival of research in relationship systems under the leadership of Lowie. On the whole, however, the American group was anti-Morgan, the true revival of Morgan's lead developing at the hands of Rivers in England. Rivers not only attempted to rehabilitate the work of Morgan, but upon the basis of his own field studies, developed theories for interpreting relationship phenomena. In the main, the position taken by Rivers was that, as a rule, each specific terminology of relationships is a concomitant of an equally specific form of marriage, and, in general, that the classificatory system is a concomitant of exogamous marriages.

Dual exogamous divisions and exogamous sibs would, according to his view, be the social setting giving rise to the classificatory system, and if a tribe were found with a classificatory system in use, but without evident exogamous groups of any kind, then we might infer that it either once possessed them, or borrowed its social system from a tribe possessing them. In terms of origin these alternatives would amount to the same thing. Rivers regarded such correlations in social function as the important aspect and suggested that the objections to the terms descriptive and classificatory may be met by designating the former as the "family" system and the latter as the "sib" system, or perhaps, the exogamous system.

In the main, it seems that the tendency now is to accept the attitude of Rivers, in so far as these systems are an aspect of social grouping and are important phenomena in social anthropology, because they are definite and susceptible of objective

treatment. Further, the recording of data on social organization, as a research technique, emphasizes relationship, the tendency being to follow the genealogical method of Rivers because experience has shown this to be the most direct approach. Usually the tribal group is small, so that a census can be made, listing every person. Then, more or less complete genealogies can be made, defining the relationships. A clear statement of this method may be found in the British handbook on anthropology from which we quote:

It is a very general practice among people of rude culture to preserve pedigrees, often so extensive that a man is able to give in genealogical form all the descendants of his great-grandfather, or of some still more remote ancestor. Such pedigrees should be collected and if the community with which you are working is not very large, an attempt should be made to record the pedigree of every one of its members. The social division or divisions to which each member of the pedigree belongs should be recorded, and also his social status, and a collection of material of this kind will furnish a mass of concrete data which can then be used to work out in detail the nature of the social organisation, the method of counting relationship, the regulation of marriage, the mode of descent, inheritance and succession, and many other subjects. The great value of this procedure is that you are yourself using the very instrument which the people themselves use in dealing with their social problems. It is quite certain that people would not preserve in their memories these extensive pedigrees unless they were of practical importance, and there is no doubt that where the pedigrees exist they are continually in use when the people are dealing with situations which arise in connection with marriage, inheritance of property, succession to chieftainship and other social conditions. In acquiring a knowledge of the pedigrees, the inquirer learns to use the concrete method of dealing with social matters which is used by the natives themselves, and is able to study the formation and nature of their social classification, and can exclude entirely the influence of civilised categories.⁶

⁶ Barbara Freire-Marreco and John Linton Myres, *Notes and Queries on Anthropology*, The Royal Anthropological Institute (London, 1912), 119.

For examples of published genealogies, see: W. H. R. Rivers, *History of Melanesian Society* (1914); A. L. Kroeber, *Zuñi Kin and Clan* (Anthropological Papers, American Museum of Natural History, vol. 18, part 2, 1917); Elsie Clews Parsons, *Laguna Genealogies* (Anthropological Papers, American Museum of Natural History, vol. 19, part 5, 1923).

In conclusion, it is fair to say that the approach to the subject so vigorously pursued by Morgan was the beginning of a development in objective method of which the genealogical method is, so far, the outcome. With it, as a matter of experience, is the conviction that the social organization of a new tribe should be approached in this concrete way.

THE DISTRIBUTION METHOD

One common criticism of the Rivers method is that no account is taken of geographical distribution and the possibility that one tribe may change its system in imitation of another. Morgan saw no particular difficulty if the systems he placed upon one time level were scattered at random over the world; but with the data now available on geographical distribution for many phases of culture, it is plain that the geographical distribution for any specific system of reckoning relationship should be consistent with the distributions for other traits in culture. We have already observed that the matter of relationship systems is more or less intimately meshed with other phases of tribal life and so is a trait of culture that may be expected to behave after the manner of such phenomena. Unfortunately, as yet, the study of these systems by the method of distribution has not passed beyond the pioneer stage, the two principal studies being those of Gifford and Spier. However, following his criticism of Morgan and Rivers, Kroeber made a brief review of the Indians in California in which he claims to demonstrate that the three types of Indian culture in California, the northern, central, and southern, are also discernible in differences in relationship systems. He therefore infers that whatever be the factors that operate to differentiate these three culture areas, they operate also in relationship systems.⁷ A few years later Gifford published an exhaustive study of the California systems, reaching the same conclusion, on the basis of geographical distribution.

The work of Spier consisted in classifying the tribal systems found in the United States and Canada and plotting their dis-

⁷ A. L. Kroeber, "California Kinship Systems" (*University of California Publications in American Archaeology and Ethnology*, vol. 12, no. 9, 339-396, Berkeley, 1917).

tribution. Since one system may vary from another in each case of individual pairs recognized, they can be classified only by resorting to some generalization. "No two systems are identical; a class is merely a group of systems more alike than they are individually like any other class," says Professor Spier, and so sets up eight classes, or types: Omaha, Crow, Salish, Acoma, Yuman, Mackenzie Basin, Iroquois, Eskimo. With one exception, a single tribal system is selected as the type specimen, somewhat as types are selected in zoology. For the details of this classification, the reader should consult the publication; but a single type may serve as an illustration, the Omaha:

In this system the mother's brother is an "uncle" and his male descendants through males are "uncles." The daughters of these "uncles" are "mothers," whose children are "brothers" and "sisters." The father's sister is an "aunt," her children being "sister's son and daughter" if the speaker is a male, and "son" and "daughter" if female. Their children are "grandchildren." . . .

In the California systems of this type the "uncle's" daughters are "mother's sisters" (as among the first seven tribes listed below), or "mother's younger sisters."⁸

The distribution of the eight types is shown on the map in the author's publication, from which it appears that there is a tendency for each type to concentrate in a single region. The result is, then, much the same as in Gifford's study of California; these tribal systems show distributions similar to and often correlated with those of other culture traits. This raises the question as to the efficiency of the method advocated by Rivers, in so far as the phenomena are not peculiar to relationship and marriage systems, but seem to operate in culture as a whole.

IDENTITY OF THE PARENT

The reader may not have conceived of a community anywhere in which it was not taken for granted that the father had a biological relation to the child. Yet, in parts of Australia and the Pacific Ocean, and perhaps elsewhere, live primi-

⁸ Leslie Spier, "The Distribution of Kinship Systems in North America," (*University of Washington Publications in Anthropology*, vol. 1, no. 2, 69-88, 1925), 75.

tive peoples whose ideas on the subject are different from ours. In the case of the Trobriand Islanders, the father is not regarded as a true parent in the biological sense, but it is believed that the child comes to the mother supernaturally. Nevertheless, these people maintain a system of marriage and the father is charged with the usual responsibilities for the well being of the child. Their ideals and social practices in this respect are similar to those of people who believe otherwise.

However this may be, in Morgan's day it was an accepted principle that every people, however primitive, would recognize the obvious relation of mother and child, but might find it difficult to identify the fathers. They saw in this a satisfactory explanation for inheritance through the mothers, but went farther in assuming that this was the first or the most primitive form of inheritance. The naturalness of the procedure seemed obvious to them. Now, our wider experience with primitive peoples, renders the naturalness of the procedure doubtful. On the other hand, we must still admit that the primitive mind is hazy on the physiology of reproduction. To this we will return under the head of marriage, but the difficulties met by pioneers in the study of society may have been, in part, difficulties of their own making. Taking it for granted that marriage and its maintenance were based wholly upon knowledge of an equal share in reproduction, they sought a rational explanation for each type of marriage and each primitive relationship encountered. The easier and safer course is, as is now done, to accept the universal practice of marriage and the assumption of a relation between each of the married pair and their children, as the closest and most binding relationship in society. Why this practice is universal and why it persists, is so far a speculative problem which may well be passed over without further comment. This, however, does not dispose of the question as to how much knowledge of parentage did exist among primitive people and what they considered the function of the father. Recently, Malinowski, on the basis of field studies, defends the view that the father's status is due to sociological factors rather than to physiological knowledge. Accepting the universality of marriage and the family fireside, it is possible to explain many things sociologically. Thus, while

Malinowski finds the Trobriand Islanders ignorant of the physiology of reproduction, they maintain marriage and ban the bearing of children by unmarried women. He explains this as follows:

A woman with a child and no husband is therefore, in the eyes of tradition, an incomplete and anomalous group. The disapproval of an illegitimate child and of its mother is, then, a particular instance of the general disapproval of everything which goes against custom, against the normal course of things, of everything which runs counter to the traditional pattern and the customary arrangements of the tribe. The family, consisting of husband, wife, and children, is the standard set down by tribal law, which also prescribes to every member a rigidly defined part to play. It is therefore not right that one of the members of this group should be missing.

Thus, though the natives are ignorant of any physiological need of a male in the constitution of the family, they regard him as indispensable socially. This is very important. Paternity, unknown in the full biological meaning so familiar to us, is yet maintained by a social dogma which declares: Every family must have a father; a woman must marry before she may have children; there must be a male to every household.

The institution of the individual family is thus based on a strong feeling of its necessity, quite compatible with an absolute lack of knowledge of its biological foundations. The sociological rôle of the father is established and defined before there is any recognition of his physiological need.⁹

SUMMARY

Morgan was the initial discoverer of relationship systems; at least, he was one of the first to conceive that the objective study of tribal systems might reveal the forms of marriage previously followed by man. In our brief review of the archaeological insight, we noted the significance of time sequence in culture, of knowing the earlier and succeeding forms of community life. Naturally, respecting such a vital matter as marriage and its associated social procedures, there is universal de-

⁹ Bronislaw Malinowski, *The Father in Primitive Psychology* (New York, 1927), 84, 85.

sire to know how it began and the true order in which the various known forms of marriage came upon the scene. Morgan took it for granted, that marriage and community life, in all its phases, grew from small beginnings, and that the forms observed among living peoples represented various stages of progress. He assumed that any form of marriage, especially the adoption of restrictive rules limiting marriage to certain classes, would entail the setting up of methods of address and the recognition of relationship consistent therewith, and their terminology, once firmly fixed in the speech of the group would survive indefinitely. He believed also that these survivals of procedure would continue long after another form of marriage regulation had been adopted. The American school rejects these assumptions, taking the view that, while these relationship systems are realities and susceptible of objective determination, they are not correlated with any form of social procedure, which is to say, that they have no relation to marriage. Neither side to this controversy has, as yet, given satisfactory objective proof that its position is the correct one. It is obvious that the method pursued by Morgan is inadequate, but no one has suggested a new method of empirical approach. The available data for certain regions in North America have been subjected to classification and geographical distribution, the outcome of which, so far, is the suggestion that the geographical behavior of relationship and marriage systems is similar to that for other social systems in the cultures of the tribes studied. That is to say, relationship systems are a part of tribal culture, and as such still remain one of the intriguing phenomena of social anthropology.

CHAPTER X

MARRIAGE

Marriage holds so prominent a place in social science that its omission here would be conspicuous. Yet, the previous discussion is a treatise on marriage, in so far as tribal grouping serves as the setting for marriage restrictions and in so far as relationship systems are an aspect of marriage. However, now that we turn to marriage as a social phenomenon, it seems necessary to specify just what it means. Westermarck proposed the following :

. . . A relation of one or more men to one or more women which is recognised by custom or law and involves certain rights and duties both in the case of the parties entering the union and in the case of the children born of it.¹

This is about the minimum requirement, and if we bear in mind that marriage, as here treated, is a social institution, the preceding definition, though cumbersome, may serve. We are apt to conceive of marriage in terms of our own system, but if we should incorporate into the definition some of the characteristics we consider necessary, experienced anthropologists would come forward with data from some tribe or other where marriage was maintained without regard to such requirements. For example, we expect the husband to reside with the wife, and to take her as a companion in social affairs, but there are tribes in whose villages are barracks in which the men spend most of their time and under no circumstances eat with their wives, or rarely treat them as social companions. Yet, these men discharge many other responsibilities of husbands and fathers. Many other curious deviations from our idea of marriage are to be found in the descriptive literature of social anthropology, but marriage, in the minimum sense of the defini-

¹ Edward Westermarck, *A Short History of Marriage* (London, 1926), I.

tion, appears everywhere, and so is a reality in the social sense, or is an aspect of culture. In the previous section it was suggested that marriage as an institution could exist quite apart from considerations of biological parentage and sex ideals. In some tribes, if a man and woman are married, then all children born to the woman, or adopted by her, are the children of her husband; no other determinant need be considered. No thought is given to the identity of the biological parent. The essential of marriage under such conditions appears to reduce to the requirements that a man must be formally associated with a woman in the rearing of children, actual or expected.

The specific modes of marriage observed the world over have been classified in various ways, according to the objective of the author. With these the reader is, no doubt, familiar; we refer to such concepts as marriage by purchase, by capture, by exchange of gifts, with consent of the bride, as arranged by parents, through public control, etc.; the other classification, monogamy, polygyny, polyandry, and group marriage is one in which the number of wives or husbands is the basis of distinction. Each of these forms of marriage is found somewhere among primitive peoples and is described in ethnographic literature.

In former years anthropologists and sociologists gave more attention than at present to theories accounting for the origin of marriage. We have referred to these under appropriate headings in the preceding pages, but it seems in order to comment upon them once more. Logically, one may assume a time when marriage, as a social institution, did not exist and proceed to account for its appearance. In 1861, Maine and Bachofen, working independently, developed two opposing views, viz., a, that the first step out of animal chaos was the patriarchal family; b, that the matriarchal family was the first. As we have seen, McLennan and Morgan favored the second and assumed the initial stage to be promiscuity. The tendency of later writers is to reject the notion that a state of promiscuity was universal among mankind; in this they follow the lead of Westermarck. One of the prime difficulties in checking these theories by the available data, lies in the confusion of sex life with marriage as a social institution. It may well be, as many

have assumed, that there is a monogamous biological tendency in human behavior upon which is reared the social complex of marriage, but it is equally conceivable that this may be non-monogamous in character. The behavior of the non-human primates seems to show promiscuous tendencies. Further, the concrete studies of tribal marriage systems are scarcely penetrating enough to throw light on where the emphasis is placed, upon the married pair or upon the children. For example, sterility is often regarded as ground for separation, the folk notion seeming to be that a married pair without children is socially abnormal. If it should turn out that the child is the point of regard, and that primitive physiological knowledge was such as to dissociate the child and sex functions, then the problem as to the origin of marriage should be formulated in a different way. Yet, further speculation on these points is barely justifiable, since a final solution cannot be expected to result from such methods.

It appears then that modern anthropologists do not accept the older view that crude forms of marriage evolved out of a state of promiscuity, the last stage of the development being monogamy. They are disposed to regard the known forms of marriage as regional or special developments. Another question arising in this connection is as to whether some forms of marriage are better adapted to one type of tribal culture than to another. Stated in broader terms, this raises the question as to whether primitive in contrast to civilized cultures favor one form of marriage. This line of inquiry has not been carried far, but the reader familiar with the literature on marriage will recall statements to the effect that pastoral peoples are inclined toward polygyny. If such proves to be the case, an important principle in the development of marriage as a social institution would be evident. The only serious attempt to discover such relations of marriage forms to modes of life, or culture states, is to be found in the work of Hobhouse and his associates in the London School of Economics. From the data for several hundred tribes, Hobhouse correlated economic status and various social traits, including forms of marriage. His tables show a number of interesting correlations and citation may be made here to the conclusions respecting the forms of

marriage. It seems that in so far as these tables may be taken as representative, no form of marriage tends to be more frequent among hunting peoples than among agriculturists. Pastoral people, however, lead in the practice of polygamy. Hobhouse states the outcome of his study as follows:

We find monogamy here and there in every grade of culture except the pastoral, and the most that can be properly said is that there is more of it . . . under the conditions of the jungle or forest life. On the explanation of this fact our authorities throw very little light. Probably the forces making for monogyny throughout the uncivilised world are two. One is the relative number of the sexes, as to which, in the absence of a census, we have no trustworthy information. The other is economic. First, poverty is against polygamy, as is seen on the reverse side by the constant gain of general over occasional polygamy as we advance on the industrial scale. Secondly, the special conditions of the forest life, perhaps in particular the close association of family groups, and the related practice of assigning a specific cousin as a partner tells in favour of monogamy. Whether beyond these there are physiological reasons associated with the mode of life can only be matter of conjecture. But whatever the conditions making for monogamy, they recur throughout the world, though with less intensity in other forms of culture. In every grade, however, when considered as a whole they are seen to be overborne by the opposite forces making for polygamy. In a word, the permission of polygamy is the rule throughout the uncivilised world, its practice extending with industrial development but reaching a maximum in the pastoral state.²

We may approach the question in a simpler way by noting the relative number of tribes observing each form of marriage. Thus, if a world census were taken as to the forms of marriage tolerated, we would find a large majority favoring polygyny; on the other hand, monogamy, polyandry, and group marriage constitute the minority, but of these monogamy leads. The literature on tribal practices is often confusing, for monogamy is tolerated everywhere. A polygynous people do not forbid monogamous marriages, they merely leave a man free

² L. T. Hobhouse, G. C. Wheeler and M. Ginsberg, *The Material Culture and Social Institutions of the Simpler Peoples* (London, 1915), 162-163.

to take more wives, if he can or so desires. On the other hand, a polygynous tribe will frown upon polyandry and group marriage. The forms of marriage then are not exclusive, and a tribe can be characterized by the unions it forbids rather than by the prevalent type. In seeking the original form of marriage, some authorities seize upon the fact that monogamy is tolerated among all peoples as evidence of its greater antiquity. This peculiarity, they say, is because monogamy was the natural original form of marriage preceding the development of social institutions. But this is not sufficient proof, because it seems equally probable that monogamy may have developed out of polygyny as a more satisfactory social adjustment.

Morgan, on the other hand, regarded marriage as having been preceded by a state of no marriage, which he designated as a state of promiscuity. This has logical justification, but considered biologically, there is little support for it. The chief objection is that promiscuity among humans seems to reduce the birth rate, or at least, the child survival rate, below the level necessary for the tribe to exist. A high degree of certainty cannot be accorded this statement, but in so far as reliable data are available, everything points to such a biological limitation on promiscuity. We now know that no tribes have been observed living in complete promiscuity and everywhere we find some form of marriage required and standardized notions of incest maintained.

Returning to the forms of marriage, it is admitted that a man usually marries one woman at a time and so is monogamous at the outset. Yet, this kind of logical interpretation is not important when we consider the form of marriage recognized by the tribe as its ideal. As we have said, the majority of peoples appear to take polygyny as their ideal. Our knowledge of the large anthropoids, the gorilla and the chimpanzee, is as yet too incomplete to give a clear statement of their mating habits, but since they are the most like man in their behavior, we may anticipate some important inferences when they have been more carefully observed. In the meantime, we must leave the matter undecided, though, as it stands, polygyny has the better of the argument.

BIOLOGICAL FACTORS

We have noted the probability that biological factors bar complete promiscuity, suggesting that restricted mating and family life are essential to the preservation of the group. Further, one peculiarity of man is his long period of dependence, a period much longer than among the mammals in general, whose young grow up in a season and can then care for themselves. The larger apes are the only creatures that approach man in the length of time required to reach maturity. Educators have regarded man's long growing period as a necessary provision for his preparation for social life, but however this may be, it does bear strongly upon the family and the duration of marriage. The birth interval with women, primitive or civilized, may be a year or less, and in any case the immaturity of the children will overlap so that for from twenty to thirty years, depending upon the age of the mother at marriage, there may be young dependent children to be cared for. As long as there is a sharp distinction between the work of men and women in the primitive group, the support of these children will call for the services of at least one woman and one man. This responsibility must be assumed in one form or another, if the group is to survive as a community. It is conceivable that a savage woman might hunt or range alone, with sufficient success to keep herself and her children from starving, but the group would scarcely exist, or its social life would be reduced to the vanishing point. It is in this sense that there is believed to be a biological basis to marriage, or that biological factors hold the group to some form of marriage. Naturally, this assumption should not be carried too far. No one has been very successful in separating the original nature of man from the conventional, or the biological from the social. There is nothing strange in this because one cannot function without the other. They are closely integrated to form community life. Yet, in some instances, as in marriage, a good case can be made for a complementary relation between biological factors and social behavior.

Even specific forms of marriage have been considered as adjustments to biological factors. Thus, it has been proposed that

the form of marriage depends upon the sex ratio. If, it is said, the number of women exceeds that of men, polygyny will result in a primitive community, all the women being economically dependent. Likewise, if there are few women, a form of polyandry will be the natural outcome. This is at least logical. Granting that a tribal population might, because of hereditary or environmental factors, regularly bring to maturity twice as many males as females, polyandry would suggest itself to us as one solution. While such a determination of marriage form seems reasonable, it is difficult to test the matter by observation. Infanticide is often resorted to as a means of adjusting the sex ratio to social and economic conditions, and so it is possible that the form of marriage may, in turn, determine the ratio of sex survival. So, until more data on the sex ratio among primitive peoples are available, we may consider this case unproven. Man is clever in adjusting his life to the conditions in which he finds himself, and is quite capable of correcting inequalities in the sex ratio, if that ratio conflicts with his ideals. Naturally, there are limits to such adjustments, since under another head we noted the possibility of a sex ratio becoming so abnormal as to result in extinction.

Further, attempts have been made to show that monogamy is the form of marriage most favorable to the birth rate. The chief difficulty with such a proposition is that good statistics are available for monogamous countries only. However, certain studies suggest that if no control is exercised, a primitive and a civilized woman will bear the same average number of children. But to test the relative favorableness of each form of marriage, one needs comparable data from many primitive groups. Yet, as we have seen, all forms of marriage are found and the tribes practising them survive; perhaps the important question is that of the infant survival rate. Among primitive peoples the child death rate is said to be far higher than in European countries; the causes for these differences are to be found in the respective modes of life, rather than in the birth rate or the form of marriage. Still, it is conceivable that the form of marriage could modify the birth rate and there is some reason for believing that polyandry and group marriage, in so far as they approach a state of promiscuity, do result in fewer

births than either monogamy or polygyny. As to the last, the data are conflicting, so that no conclusion can be drawn for monogamy and polygyny. Hence, the proof that one form of marriage is more favorable to reproduction and is consequently the natural form of marriage, seems destined to await far more data than are now available.

Again it has been assumed that marriage at an early age lessens the fertility of women and so tends to reduce the population; whether for this or some other reason, civilized nations have legislated against early marriages, but even so, the legal age is usually much lower than that favored by public opinion. The practice among primitive peoples varies, but rarely do any of them reckon ages in years as we do. They consider a girl ready for marriage when physiological signs of maturity are observed; this may be at twelve years or less. In general, few primitive girls reach the age of fifteen and remain unmarried. Child marriage, that is, marriage before physiological maturity, is generally deprecated by even the most primitive. For reasons just stated, no data are available for comparing the relative birth rates for early and late marriages among primitive peoples, but among Europeans, while there is a belief that very early marriage reduces the birth rate, the available statistics fail to support this belief. In general, the practice of primitive people seems a reasonable physiological adaptation. For educational reasons, or because of the complexity of modern social life more experience is necessary to assume the responsibilities entailed in marriage, civilized man looks on early marriages as objectionable.

MARRIAGE CEREMONIES

Like other serious undertakings in primitive life, acquiring a wife or a husband is accompanied by formal procedures. In books dealing with the subject will be found lists of what primitive people do to sanction and recognize marriage, a perusal of which will reveal a great variety of procedure. As in forms of marriage, the possibilities seem to have been exhausted. Some authorities have sought in these marriage ceremonies survivals of the original procedure. One theory is that at the beginning of community life, the male captured and forcibly carried away

the female. Among a number of tribes such seizure of the bride is enacted with more or less realism, and customs, such as carrying the bride through the door, have been cited as the last surviving trace of "marriage by capture." It may well be that in one or two parts of the primitive world conditions arose favoring the practice of literal wife capture, but it need not follow that every analogy to seizure of the bride is a survival of such a custom. One objection to the probable universality of wife capture is that marriage is almost always between individuals in the divisions of the tribe, living in peace and harmony and are agreed to in advance. As Westermarck showed long ago, a woman may be carried away by force among many people, even the most civilized, and captives taken in raids and war may be made wives, but nowhere does this seem to be the universal custom.

"Marriage by purchase" is another familiar term in sociological literature, and applies to such marriages as require a consideration from the groom and his relatives. Sometimes this takes the form of an exchange of property, first, from the bride's relatives and later, from those of the groom. If later the husband be deserted by his wife, it is expected that her relatives make restitution for the bride price. Hobhouse found that among 434 tribes, 303 required a consideration for the bride. This custom, however, seems not to be correlated with any one type of marriage ceremony.

However, one phase of marriage seems to be universal: it is agreed upon by the relatives of the contracting parties and the negotiations leading to this agreement are usually conducted by the elders in each family, thus raising marriage to a family, if not a community, level. Among no people do the associates of the contracting parties fail to look upon marriage as something that concerns themselves as much as, or more than, the two contracting parties. The ceremonial procedure we have just noted is an expression of group sanction and serves notice that the marriage is a binding obligation. Christian nations not only exercise legal control over marriage, but, for the most part, the ceremony is a religious one. Primitive people rarely go so far, but regard marriage as a solemn and binding obligation.

DIVORCE

A few primitive tribes look upon marriage as for life, but among others divorce is recognized. The procedure may be easy or difficult, varying according to custom. Our previous statement that the primitive community views marriage as a binding obligation, should not be construed to mean that marriage among primitive peoples is more stable than among Christian nations; on the contrary, divorce is often frequent, and abduction and elopement are far from rare. The readers of Spencer and Gillen's sketches of Australian life will recall how a man's wife would often be enticed away and how quickly the deserted husband would retaliate by stealing off with another man's wife. A good-looking young woman, unless married to a powerful man, would probably change husbands a number of times. In more advanced primitive groups, where the solidarity of the group is greater, more resistance will be offered. Some tribes provided drastic punishments for elopements and abduction; yet, even so, separations are frequent when judged by civilized standards. The important point, however, is that divorce is tolerated, and more or less controlled by the group almost everywhere. Among some 271 tribes noted by Hobbouse, only four per cent regarded marriage as insoluble, 24 per cent permitted separation for certain specified reasons, while 72 per cent left the contracting parties free to decide for themselves. On the other hand, gross injustice by one of the contracting parties, excessive cruelty, or depravity is certain to arouse the group and probably lead to retaliation, which demonstrates that, after all, the group does take cognizance of the termination of marriage. If there are children, custom provides for their care until the mother marries again.

SOCIAL STATUS

Little notice has been taken of the place of marriage as defining the status of the individual. The impression one gets from the literature is that primitive woman found marriage a doom from which she would gladly escape, if she could, whereas

the man found marriage a trivial incident. On the other hand, every primitive community seems to draw sharp distinctions between married and unmarried men. Among many Indian tribes a speaker will first address the married men as the class responsible for the welfare of the group. Until a man has a wife, his position in the community is vague and the man who, because of deformity or mental incapacity, cannot secure a wife is in an undesirable situation. In Australia, for example, the older men control the group, take the young women for wives and thus delay the entrance of young men into the married state. In general, then, the social position of the man is such that he improves his status by marriage. On the other hand, when a man marries he assumes obligations. If hunting is a part of his tribal culture, he must secure food, often for the parents of his wife as well; if his culture is pastoral, he must accumulate a herd, etc. Further, he is expected to take his place in the ceremonial and political activities of the tribe. In addition, he must rear a family and observe restrictions in his associations with persons of the opposite sex. It appears then that primitive society has adjusted its culture to the marriage relation and so every one leading a normal life is expected to enter into that relation. Once married his duties and obligations are clearly defined.

The primitive woman also is expected to marry. Her change in status seems to vary more than that of the man. Among many tribes girls enjoy unusual freedom from labor. This freedom of the girl is marked in the Islands of the Pacific, but after a few years of play and frivolity, she marries and settles down to the responsibilities of home making and rearing a family. She is no longer free to follow her inclinations. In some other parts of the world girls are carefully guarded, are not allowed to associate with boys, and finally, married. An unmarried woman, however, has a doubtful social status and is rarely looked upon as decent or important in the community. As a rule, primitive women do not actively participate in government or in rituals. Everywhere war and hunting are restricted to men and while this is generally true of other functions, it is observable, however, that women may be rulers, may

develop cults, and may serve as priests. In all of these, however, they usually achieve prominence after the child-bearing stage.

Concerning domestic relations there is little reliable information. Extreme cases in which women are beaten by their husbands are cited, but there is no way of estimating the frequency of such affairs. Husband and wife quarrel now and then, it seems, and occasionally resort to blows. Spencer and Gillen describe the fights between women in which they beat each other cruelly, but they do not mention the fights between wife and husband. It is not likely that the man is always the victor. On the other hand, many travelers describe examples of affection and loyalty equal to any observed in contemporary civilization. Primitive parents are also over-fond of their children. Naturally, the standards of domestic tranquillity vary from tribe to tribe; in many cases an occasional beating will be looked upon as normal, but so far as the evidence goes, the ideal husband and wife relation is one of affection and peace within the limits set by custom. The reasons given as justifying divorce among the primitive differ little from those in our own society; quarrelsomeness and nagging are often cited by the savage man or woman as the qualities making life unbearable; unfaithfulness and lack of affection are also frequent complaints.

SUMMARY

Viewing marriage as a socially sanctioned relation between men and women, a wide range of custom is noted. The primary bond is between one man and one woman, which may be exclusive or multiple. The classification of form of marriage is usually based upon the distinction between a single relation and a multiple one; in monogamy both the man and the woman are married to but one at a time, in polygyny only the woman is so restricted, etc. Every possible combination on this principle seems to be found in practice somewhere, thus exhausting the possibilities. Monogamy, the simplest form of marriage, occurs everywhere even among people allowing polyandry. Under all forms of culture it is regarded as proper, though not always as ideal. On the whole, however, the number of tribes

known to practise monogamy exclusively is far less than those regarding polygyny as the preferred form of marriage. Biological factors may influence the form of marriage by a kind of natural selection, because if marriage customs are unfavorable to the bearing and rearing of children, the group cannot survive. The sex ratio in the population may also have an influence. Marriage rites have been regarded as highly symbolic or as survivals of past customs. Yet, there is little in the way of objective evidence to check the theoretical meanings assigned to many marriage customs. The attitude of the tribe toward the duration of marriage varies, but in most instances divorce is recognized and provided for. The assigned causes for divorce are similar to those in contemporary society. Lack of affection and temperamental clashes appear even in the most primitive tribes, suggesting that it is the emotional tie that plays a large rôle in stabilizing the marriage relation and that economic and social conditions are relatively less important.

CHAPTER XI

TOTEMISM

In 1791 appeared the *Voyages and Travels of an Indian Interpreter*, by J. Long, who had spent most of his life in the St. Lawrence and the Great Lakes district. While this book is one of the early sources on Indian life, its fame rests upon the introduction of a new word into our vocabulary. Rather incidentally to his narrative, Long stated that among the tribes of the Great Lakes each man claimed a protective object or being, which was, in a sense, his supernatural protector, the native name for which was *totam*. And as the Indian frequently drew or carved the picture of an animal to symbolize his *totam*, the term soon came into general use among the colonists, and was often applied loosely to any object, ornament, or image upon which the Indian placed unusual values. Later linguists differ as to the correct meaning of *totam*, some defining it as "my tribe." Apparently the idea of kinship is at the root of the matter, since in Ojibway, *ote* means kin; *ototeman* means his brother-sister kin. It is, however, of little moment what the word meant in Long's day, since the present definition of totem is to be found in current literature.

By 1850 the term was in common use among writers upon Indian subjects, and in 1861 Peter Jones wrote an account of totemism among the Ojibway Indians.¹

So far, no general significance was attached to the term, but when Sir George Grey, governor of South Australia, found something similar among the natives of that country, McLennan began an inquiry into the beliefs of primitive man respecting animals and plants and he is usually credited with discovering totemism as a worldwide institution. As McLennan saw it, the phenomenon was not merely the relation of an individual

¹ Peter Jones, *History of the Ojibway Indians; with especial reference to their Conversion to Christianity* (London, 1861).

to a totem, but also of a group of persons, particularly the exogamous subdivisions of the tribe, to which we have given the name sib. It had been remarked by previous writers that sibs usually had animal names. In Morgan's Seneca list these appear as:

Division A. Bear, Wolf, Beaver, Turtle.

Division B. Deer, Snipe, Heron, Hawk.

It was said, for example, that all children born of mothers in the Bear sib would have the bear as their totem. Hence, McLennan and many others since, have assumed that a relation existed between totemism and exogamic grouping.

Although the pronouncement of McLennan attracted some attention, it remained for Robertson Smith (1885) to launch a controversy by writing a book, the thesis of which was that the Semitic religion was based upon totemism and, consequently, that it was the foundation of western European civilization. Naturally, this was provocative and stimulated the study of native peoples, especially in Australia. The subject, however, is inseparably attached to the name of Frazer, who deserves the title, Father of Totemism. From 1887 to 1910 when his four-volume work on *Totemism and Exogamy* appeared, Frazer led in developing this subject and few social anthropologists refrained from taking a part in the ensuing discussions.

Totemism, as conceived by Frazer, is not easily defined, because it is an insight, or an approach, of a problem. Frazer's definition is:

A totem is a class of material objects which a savage regards with superstitious respect, believing that there exists between him and every member of the class an intimate and altogether special relation.²

This author goes on to state that the totem object is generally an animal, less frequently a plant, rarely an inanimate object, and rarest of all an artificial object, or an artifact. This might be conceived as giving three classes of totems, but such a classification seems to have no significance in tribal life,

² J. G. Frazer, *Totemism and Exogamy* (London, 1910), vol. 1, 3.

whereas if totems are viewed from the standpoint of their relations to individuals, at least three types may be observed:

1. Sib totems, or cases in which the totem is equally related to all hereditary members of the clan or gens. These are also regarded as the most common form of totem.

2. Sex totems, like those reported from parts of Australia, where all the males of the tribe have one totem, the females another.

3. Individual totems, or the type first described by Long and familiar to students of the American Indian under the name individual guardian.

So far, most writers on the subject have concentrated upon the sib totem, and it is to this that first consideration will be given. The most objective aspect of totemism is the sib name, which some contemporary students are disposed to regard as its one essential element. Yet, one rarely finds the animal name standing alone, since it is associated with a complex of customs and beliefs. This complex has been variously described, but the usual conception includes some, or all of the following:

1. A totemic name.
2. An exogamous group.
3. A belief in descent from the totem.
4. Taboos, such as prohibiting the killing and eating of the totem, touching, calling by the true name, etc.
5. A relation to the totem similar to that in a brotherhood.

The logical procedure at this point would be to cite a type example of totemism, but this will prove difficult because of the wide tribal variation and because the conception of totemism developed by Frazer and others is a generalization. Furthermore, any tribal system of totemism, as outlined above, will be enmeshed in the detailed customs and habits of the tribe and will not be understood when isolated from its culture setting. Nevertheless, the following concrete accounts of tribal systems, though lifted out of their setting and ruthlessly abridged, may give an idea of how totemic systems appear in the concrete. The examples are from North America, but Australian and African illustrations are accessible in the literature. It will be observed that the two samples cited are of systems conforming fairly well to the definition given. In many cases, perhaps in

most, the tribal systems, as found, are more attenuated, which may be due in part to the collapse of tribal life; so some allowance must be made for incompleteness in the record. On the other hand, the probabilities are that there has always been variation in respect to the make-up of the totemic complex, as some authors maintain.

THE CREEK INDIANS

In colonial days the Creek were a powerful group of tribes, that lived in what is now Alabama and adjacent parts of Tennessee. At the time the following observations were made they resided in Oklahoma.

The Taskigi social unit was, and is, the clan. There are at present fifteen of these remembered, as follows, the first four in their order of precedence: Bear, Panther, Wind, Deer, Bird, Fox, Raccoon, Beaver, Alligator, Mud-potato, Mink or Otter, Snake, Buzzard, Skunk, Rabbit. In former times, no doubt, others existed, but they are now extinct and forgotten. The clans are believed by the Taskigi to have been created in the beginning by the Master of Breath, deriving their animal characteristics from certain traits displayed by beings as they passed in review before him. He enjoined them not to marry their own kind lest they die out, and since that time they have observed the exogamous principle. Clan descent is reckoned through the mother. All the males of one clan call each other "brothers," the females call each other "sisters." One of the names by which a man addresses his clan sister is *anhómbida háya*, "my food maker," or cook. Property is not, however, generally inherited from the mother, but passes from father to son. The leading clans among the Taskigi are the Bear and the Wind. The town chief was chosen from one of these two. As descent is traced back to the totem animal itself, it is considered wrong for a man to kill or eat an animal having the form of his totem, as it would be the same as eating his own human relations. Such offenders are nowadays punished by fines which have to be paid to those of his clan who catch him in the act. Furthermore, should one person ridicule or belittle another's totem, he is likely to be taken and fined for wrong-doing by the offended clan. The fine is believed to appease the totem.³

³ Frank G. Speck, *The Creek Indians of Taskigi Town* (Memoirs, American Anthropological Association, vol. 2, 99-164, 1907), 114-115.

THE WINNEBAGO

The Winnebago Indians speak a Siouan language and originally lived around Green Bay, Wisconsin. Of them Radin writes:

The Winnebago are divided into two divisions, one known as the *wangεregi herera*, "those who are above," the other as the *manegi herera*, "those who are on earth." Descent was reckoned in the paternal line. But these appellations refer to the animals after whom the clans are named, the term *wangεregi* covering the birds, the term *manegi*, land and water animals.⁴

There are twelve subdivisions of these:

<i>A. Above Animals</i>	<i>B. Below Animals</i>
Thunderbird	Bear
Hawk	Wolf
Eagle	Buffalo
Pigeon	Water-spirit
	Deer
	Elk
	Snake
	Fish

In the religion of the Winnebago the animals named in the subdivisions listed are the chief guardian spirits, each of which, according to Radin, are "at the present time conceived as an immaterial being in control of an animal species."⁵

On the other hand, the totem animal is itself under the control of a spirit animal, the spirit of that species.

The animal is engraved as clan symbol and used as a property mark, and he is brought in intimate contact with the group by the postulation of descent. Naturally, descent is not from the "spirit" animal but from the animal. Nevertheless the clan animal has, at the same time, retained its place as a guardian spirit, and in a most suggestive way. The blessing of a clan animal is more easily ob-

⁴ Paul Radin, *The Social Organization of the Winnebago Indians, an Interpretation* (Anthropological Series, Canada Department of Mines, Geological Survey, Ottawa, 1915), 10.

⁵ Radin, *Ibid.*, 23.

tained by a member of the clan than by an outsider. The clan animal is a sort of clan protector. . . .

The most prevalent view of the relationship of the individual to his clan animal is that of descent from an animal, transformed at the origin of the human race into human beings. This view is expressed in some of the origin myths and reflects the general conversation with individuals. Direct descent from an animal was never postulated. The definition of the term "animal" is, however, very difficult. The Indians themselves seem to make a distinction between the animal of to-day and the animal of the heroic age. The main characteristic of the animal of the heroic age was his power of transformation into human form and vice versa. Although he has lost this to-day, he is nevertheless descended from this animal. The human beings are, however, descended from precisely the same "animals," so that it might be well to bear in mind that descent from the transformed animal does not mean descent from the animal of to-day. . . .⁶

In intimate relation to the attitude toward the clan animal is the conception of the tie binding one member of the clan to another. In no case did an individual regard the bond between him and another member of the same clan as based upon descent from the same animal. Blood relationship was always given as the reason for exogamy. . . .⁷

In practice, there was some confusion as to the degrees of relationship recognized; nevertheless, the totem tie "called forth the same feeling as that of real relationship," and in speaking of the Bear division, for example, a Winnebago would say "those-who-are-relatives-to-one-another."

Other examples may be found in the literature, but it is apparent that the totemic complex frequently occurs in incomplete form; i.e., not all the five characters given above (p. 198) are always present.

GEOGRAPHICAL DISTRIBUTION

The world map accompanying Frazer's great work on totemism, suggests that it is largely a phenomenon of aboriginal Australia, Melanesia and North America. Taking our own country first, the area for totemism covers almost all of the

⁶ Radin, *op. cit.*, 24, 25.

⁷ Radin, *op. cit.*, 27.

United States east of the Rocky Mountains and about all of Canada west of Hudson Bay, or, a broad band running from the south Atlantic coast to Alaska. South America appears to be almost entirely free from totemism, so far as is known, but as we lack data for most South American tribes, it may be found to be prevalent. Turning to the Old World, we note that totemism appears in India in doubtful form. Among the peoples of Africa it appears sporadically south of the Sahara, the probabilities being that it was at one time almost universal, as in Australia. Just what may be inferred from this distribution is an unsettled point; some authors see in it evidence that totemism belongs to primitive peoples, and that it arose in one place very early in the history of human society, and spread from there over the earth. However, a number of primitive peoples seem to have no totemism, nor is it possible to prove its former existence in Europe and central Asia. The opposing interpretation of these facts of distribution is that totemism arose independently in many regions as a need of the time and place, and then spread over the adjacent territories. Thus Goldenweiser states: "the complex of ideas, attitudes and practices which is totemism, is congenial to early mentality and therefore characteristic of it."⁸ Our present interest, however, is to note that totemism is a far-flung institution and so is not peculiar to any region nor group of tribes, otherwise related.

THE TOTEMIC NAME

As stated in the definition, it is usual to assume that the sib will have an animal name. This, in fact, seems to be the tendency, though when one canvasses the literature, a number of variations appear.

The older writers assumed totemism to be an accompaniment of exogamy. Naturally, if a tribe supports exogamic groups, or sibs, there will be a specific name for each and regardless of what view one may take of totemism itself, if there is a tendency to choose animal names for these groups, that in itself presents an interesting problem. In North America, it not

⁸ A. A. Goldenweiser, *Early Civilization. An Introduction to Anthropology* (New York, 1922), 284.

only appears that animal names are frequently used, but that as one passes from tribe to tribe certain animals recur. Thus, the bear and eagle are frequently encountered, but these animals are sacred to many North American tribes, or at least have mystic beliefs associated with them. So, there may be reasons for expecting the choice of names to be limited to a few animals. The chief point, however, is whether animal and plant names for sibs and other tribal divisions are of such frequent occurrence as to indicate a definite tendency to associate the two. On this point there is still some difference of opinion, but the evidence seems to justify the assumption that these associations of a sib and an animal do occur with far too great frequency to be accidental. So we can state that the association of animals and plants with kinship groups is frequent the world over and this in itself constitutes a problem still to be solved.

DESCENT FROM THE TOTEM

In many theories of totemism it seems taken for granted that the totem is, or represents, the ancestor of the group. In the main, this idea came from Australian data, for almost everywhere in that land the natives believed each totemic group to have originated from the totemic ancestor. In America the case is not so clear, but there are many devious ways of expressing the relations of the totem to the group, which suggest the idea of descent. Also, in Australia, the soul, or spirit of the individual is believed to emanate from the totem ancestor, the fundamental characters of which will become apparent when the entire complex of Australian belief is taken into account.

Each of the *alcheringa* ancestors (Aranda) is represented as carrying with him one or more sacred stones or *churinga*, each one of which was associated with the spirit part of some individual. At the spots where the ancestors originated and stayed, or at the camping-places where they stopped during their wanderings, local totem centres (*oknanikilla*) arose; for at such spots a number of the ancestors went into the ground with their *churinga*. Their bodies died, but some natural feature arose to mark the spot, while the spirit remained in the *churinga*. Other *churinga* were placed in the ground, a tree or rock again arising at the spot. Thus the

entire country through which the *alcheringa* ancestors travelled is dotted with totem centres at which a number of *churinga* associated with spirit individuals are deposited.

The Aranda believe that another spirit being issues from the *nanja* (the sacred tree, rock, or what not, at the *oknanikilla*). This spirit watches over the ancestral spirit which abides in the *churinga*. Among the Unmatjera and Kaitish there were comparatively few groups of individuals who left spirit individuals behind them associated with *churinga*; but here the ancestors, often two in number, had with them stores of *churinga*, which they deposited in the ground, thus giving rise to totem centres.⁹

Another aspect of Australian belief upon which Frazer places great emphasis is the idea that the totem ancestor exudes the spirits of children, and that when a woman passes the place where the totem resides one of these spirits enters her and later a child is born. Thus, the origin of the individual is attributed to the totem. There are two possibilities in such a situation: it is conceivable that a specific belief regarding the totem object as the source of the spirit may have arisen in association with the totem object; on the other hand, it is conceivable that, in general, the philosophy of aboriginal Australia accounted for the origin of children by assuming that spirits entered the woman at favorable opportunities. With such a background of belief, the specific ancestral relation to the totem would have less significance. Which of these possibilities represents the true evolution of the totem complex in Australia, we cannot say, but that some allowance must be made for such a basic tribal conviction is suggested when we note that totemism in North America is not accompanied by the same background of belief as in Australia and that also the belief in direct descent from the totem is rare. All this discussion, so far, tends to reveal geographical types of totemism, differing widely from one another. And the only statement the data seem to justify is that the relation of the individual to the totemic animal or object ranges from an ancestral one to the possession of a name in common with the group.

⁹ A. A. Goldenweiser, "Totemism, an Analytical Study" (*Journal of American Folk-lore*, vol. 23, I-II5, 1910), 29-30.

THE KINSHIP GROUP

There is much difference of opinion as to the relationship of exogamy to the totem, perhaps the majority denying that the custom is in any way necessary to totemism. Frazer's final view is that exogamy and totemism have different origins. Their apparent relation lies in the circumstance that exogamy is almost universal and so, of course, wherever totemism is found, it is usually associated with it, together with a varying list of other customs. But, we cannot escape from the fact that kinship groups and exogamy are all but universal phenomena, and the assumption that this universal occurrence is based upon something deep set in human behavior. Totemism, on the other hand, though occurring in many parts of the world, does not approach universality and is for that reason usually considered as later in origin than exogamy. If this was actually the order of appearance, then totemism developed under exogamic conditions. In other words, given exogamy, we may or may not expect totemism to arise, depending upon the experiences of the tribe and the examples set by its neighbors.

On the other hand, given a tribe with an exogamous system and an attitude implying the recognition of kinship to an animal or other object, as in totemism, we may expect to find a complex of beliefs functioning in harmony therewith. Thus, the relation of the individual to the totem will be determined, in part, by the particular kinship system under which the totemic complex developed. As the matter stands, then, we can say that an exogamous sib does not seem essential to totemism, but that a tribal sib, or a family group of some kind is, by the usual definition of totemism, necessary. Totemism, as usually conceived, is a group phenomenon.

KINSHIP WITH THE TOTEM

The preceding leads naturally to a consideration of the totem bond. Though mere logic is not a good prophet in matters of social behavior, one may expect that in groups where the totem is an ancestor, the members of the group will look upon themselves as relatives. Even in cases where the totem is merely a

protector, the group may take the attitude that constitutes a brotherhood. Morgan felt that the kinship bond in a sib was the basic factor in social organization and it may well be that it is of great weight in primitive communities. Following much the same lead, Frazer and others have regarded totemism as the earliest form of kinship and so in turn one of the, if not the fundamental in culture. But this seems to overstress the totemic bond by making it identical with the kinship group, whereas the consensus of opinion seems to be that while the recognition of kinship is universal, totemism has a sporadic distribution. Rather should we look upon the totem tie as a special bond between groups within the tribe and not as a bond exclusive of all other ties.

One of the outstanding features in North American totemism is the idea of a protector or guardian. The belief in an individual supernatural guardian is a particularly prominent trait among the tribes where totemism has been noted, and, as we have seen, the word totem was originally used to denote such an individual guardian. With such a background, there is good reason to suspect that the totem will assume the attribute of a protector or guardian. This is more or less true and in cases where the totem is an animal, say, a bear-like being, living bears are linked with this mythical bear and so stand as kin of the same generation level. It is this analogy that has been seized upon as indicating a fraternal function in totemism. But this is not peculiar to totemic groups, because the whole tribal culture among these Indians is meshed with a similar attitude toward animals and guardians. In Australia, on the other hand, the guardian idea is not so prominent, descent from the totem being emphasized. So it appears that the kinship idea, or bond, is not peculiar to totemism, but is rather a reflection of the tribal background of belief respecting relatives and other living forms.

T H E T O T E M I N A R T

In early accounts of the totem as an American Indian trait, emphasis was given to the drawing of the totem animal. This was also a way of expressing the relation to an individual guardian, and further, the Indian employed the technique of

picture writing to express his individual name. In the mind of the White observer there was a tendency to link these objective symbols with the totemic idea. Yet, an intensive study of art in the North American totemic area leads one to doubt the relation between the totem and art was more than the accidental overlapping of these two phases of tribal culture; and, in any case, it is among the totem pole makers of British Columbia and Alaska that the totem takes first place in tribal art, where the totem animal may not only be carved on the totem pole, but may be represented in masks and even in household utensils. In Australia, art is not so realistic, consisting, for the most part, of lines, circles, and areas of color, which when used in totemic ceremonies either represent the totem or are intimately associated with it. Yet these designs are rarely found dissociated from the ceremony and so there seems to be no large body of tribal art reflecting the idea of the totem. In general, then, it is not clear that the totem had a basic relation to primitive art, as some have suggested; but, on the other hand, almost everywhere, at least, some objective representation of the totem is attempted, possibly because every people has some knowledge of graphic and realistic art.

THEORIES OF ORIGIN

A large part of the literature on totemism is devoted to theories of origin, the best known being those of Spencer, Tylor, Lang, Frazer, Haddon, Müller, Jevons, in England; Durkheim, in France; Thurnwald, Graebner and Wundt in Germany; Powell, Fletcher, Hill-Tout, and Boas in America. This is an imposing list, a full review of which is impossible here; nor is it certain that such a review would be worth while for anyone save a specialist in totemism, for notwithstanding this long list of distinguished scholars, not a single one of the theories proposed has been widely accepted, even as a working hypothesis. As we have stated, totemism did not occur everywhere, and so must have taken form whenever and wherever the conditions were favorable, but what the social situations are that act as determinants for totemism, no one has been able to demonstrate, as may be inferred from the failure of origin theories to meet

with acceptance. In the words of one of the latest writers on the subject:

. . . we do not see—at least, no one has yet shown—any sort of necessity why in certain cases clans should have borne the names of certain animals: and this is the root of the whole matter. Indeed, this practice, not being universal, cannot be necessary; and it may have had several different origins. Any relevant hypothesis, therefore, can claim no more than to agree with the known facts better than rival hypotheses; we cannot expect to deduce it from laws of human nature; whilst still another hypothesis just as good may any day be put forward by some speculative genius; and the doubt must always remain whether some important facts of Totemism have not been lost which, could they be recovered, would prove all our guesses to have been made in vain.¹⁰

In the main, however, the origin theories so far offered, center upon either the totem name, the guardian spirit, or the ancestor relation. Herbert Spencer, for example, proposed that the first names of individuals were in terms of animals and plants and that in cases where the owner of such a name founded a family, or a group, his name would be inherited by the members of that group. Somewhat in keeping with this were the ideas of Andrew Lang, who argued that the totemic name was a group name, accidentally obtained, but which once adopted, served as a nucleus for a developing complex of the totemic type. Major Powell's idea was that the secret of the matter lies in the naming process, the extension of the name to the group and group relations; Max Müller's view, that group marks or emblems first suggested the totemic relation; Haddon suggests that the food specialized in by the group gave the name; Graebner, in Germany, sees the explanation in the sympathy man comes to feel for the animals with which he is familiar; Wundt saw in totemism the original development of cults. In America, where the belief in an individual guardian is widely distributed, Miss Fletcher proposed that the totem was an inherited individual guardian and similar explanations have been made by Hill-Tout and Boas. In England, Jevons offered the suggestion that belief in an animal being, or god, was the source of totemism.

¹⁰ Carveth Read, *Man and His Superstitions* (Cambridge, 1925), 227-228.

McLennan, sometimes regarded as the discoverer of totemism, sought its origin in exogamy. The first theory to be entertained by Frazer was that totemism grew out of the belief in an external soul; later, he considered it a system of magic for increasing the food supply, but this conception was finally rejected in favor of the proposal that the spiritual ancestral relation was the cause of the associations formed. This view is sometimes called the conceptional theory, and is based upon the native belief in Australia that the spirit of the child emanates from the totem, thus forever identifying him with it.

One of the most recent theories as to the origin of totemism is the well-known claim of Freud that the whole matter can be explained in psychoanalytic terms; thus the totem taboo, like any other taboo, is an "inhibited form of wish fulfilment," totemic exogamy is a social expression against incest, etc.

From this summary of origin theories we note that in most proposals it seems to be taken for granted that totemism, wherever found, arose in the same way and under the same circumstances, whereas it may be that in America totemism grew out of the belief in individual guardians, and again, in Australia out of the beliefs respecting the origin of children, etc.; yet, even these assumptions are not susceptible of proof, and so can only be regarded as some of the possibilities. It is suggested, however, that the theories proposed are biased by the knowledge of observers, those knowing American tribes best, leaning in one direction; those knowing Australian data in another; and so on. Possibly at some future date, a scholar equally familiar with the tribal cultures in America, Africa, and Australia will present a more convincing theory of totemism.

SUMMARY

One of the first considerations is the possible universality of totemism. Because of its limited distribution and because there is no good evidence that it once prevailed among the ancestors of European peoples, and for other reasons, it is generally admitted that totemism is not universal and so need not have arisen as a direct natural response to situations of a single type. Totemism, also, is extremely variable in its content and is

prone to associate with itself many traits of the tribal culture in which it occurs. All writers upon the subject have found it difficult to frame a definition that would clearly apply to all examples of the phenomenon and this is because no two tribal systems seem to be exactly alike. There are regional differences, as in North America, where the guardian spirit seems to be the keynote of the totemic idea; in Africa, the emphasis is upon the taboo against killing, eating, etc.; in Australia, the ancestor relationship is the outstanding feature. But even within these regions we encounter great variations as we pass from tribe to tribe. This lack of absolute similarity between the totemism of different tribes has led the ultra critical to deny the reality of totemism and to regard it as the selection of certain traits of culture on the assumption that they spring from a single source; their view is that the characters we have enumerated, the name, taboo, descent, and brotherhood, should be considered as separate culture traits which just happen to occur in the same tribe. We should have, then, instead of one problem in totemism, some four or five separate problems. This point of view would, however, ignore the frequency with which the animal name is found in association with the taboo, etc., a fact for which an explanation is wanting. On the other hand, the majority opinion seems to be that totemism, as an association of variables with the recognition of a totem by the totemic group, is a reality. As to time of origin, there is no reason to believe that the institution is extremely ancient, and hence, there is little justification for regarding totemism as the source of art, brotherhood, the first steps in government, etc. And lastly, one may ask, what is the contemporary problem in totemism? The need seems to be for more exhaustive tribal studies in parts of the world where these can still be made, as in Australia, Africa, and certain sections of the New World. In all cases, however, it is not merely totemism that should be studied, but the culture of the tribe. That there is a totemic attitude among many groups of mankind, does not seem sufficient warrant for assuming that totemism is a principle that can be seized upon as expressing a distinct process in social life. If such a process is at work in totemism, it is still hidden.

CHAPTER XII

ANIMISM

In 1871 Edward B. Tylor published his classic work, *Primitive Culture*, in which he developed, among other points of view, the theory of animism, a term of his own choosing. Reduced to its simplest definition, the term stands for studies in the belief in souls.

. . . It is habitually found that the theory of Animism divides into two great dogmas, forming parts of one consistent doctrine; first, concerning souls of individual creatures, capable of continued existence after the death or destruction of the body; second, concerning other spirits, upward to the rank of powerful deities. Spiritual beings are held to affect or control the events of the material world, and man's life here and hereafter; and it being considered that they hold intercourse with men, and receive pleasure or displeasure from human actions, the belief in their existence leads naturally, and it might almost be said inevitably, sooner or later to active reverence and propitiation. Thus Animism in its full development, includes the belief in souls and in a future state, in controlling deities and subordinate spirits, these doctrines practically resulting in some kind of active worship.¹

We shall find, as we proceed, a great deal of hostility to the conclusions of Tylor, but we are interested in his work because it stands as a landmark, a new departure in the study of man's beliefs; viz., to gather objective data as to what primitive peoples professed to believe and by a comparative study to discover what they have in common, not wholly excluding our own beliefs. To evaluate Tylor's work fairly, we must recall that in his day, the controversy over Darwin's *Origin of Species* was waged, but even so, everyone was disposed to deal softly with the human soul. Tylor, on the other hand, assumed as he says, that belief in souls was a natural phenomenon and could be

¹ Edward B. Tylor, *Primitive Culture. Researches into the Development of Mythology, Philosophy, Religion, Language, Art, and Custom.* 2 volumes (Sixth Edition, London, 1920), vol. I, 426-427.

dealt with in an objective, scientific way. It was this proposal of an empirical approach to the problem, that gave a new research lead, the fruits of which are still being gathered.

The first point to raise, and one which Tylor had in mind, is whether there are beliefs common to all the known tribes of men. Our experience so far has been that few specific traits of culture are universal, but Tylor seems to have so regarded the belief in souls. However, so far as the available data go, no known tribe fails to make a distinction between the body that wastes away after death and the spirit or soul that survives. Or, to state the case in another way, whatever the complex of tribal beliefs may be respecting life and death, they reveal distinctions which are interpreted as analogous to our ideas of material and spiritual. Languages themselves, so far as they have been recorded, give further evidence of the approximate universality of this distinction. It is true that a number of observers can be quoted who deny, for instance, that the natives of Tierra del Fuego have any notion of existence after death, but others can be cited to the contrary, and usually when a tribe is thoroughly studied, the distinction does materialize. Thus, one author commented upon by Tylor, after declaring that the native tribes of South America have no religious beliefs, goes on to say that they deposit objects with their dead, a practice implying that the dead live. Perhaps the truth depends upon our definition of animism; if animism is regarded as a well-formulated conception of a soul, then a number—though not a large number of tribes—may be ruled out; if, on the other hand, this term included the vague idea that something lives on after death and that the dead are able to haunt the living, then the universality of animism will be difficult to deny. But even if the animism of Tylor cannot be regarded as universal, it has so wide a distribution that we cannot ignore the problem of conditions antecedent to these beliefs.

Tylor proposed the explanation that animistic interpretations were grounded in inevitable psychological responses to unavoidable situations. Thus:

. . . In the first place, what is it that makes the difference between a living body and a dead one; what causes waking, sleep,

trance, disease, death? In the second place, what are those human shapes which appear in dreams and visions? Looking at these two groups of phenomena, the ancient savage philosophers probably made their first step by the obvious inference that every man has two things belonging to him, namely, a life and a phantom. These two are evidently in close connexion with the body, the life as enabling it to feel and think and act, the phantom as being its image or second self; both, also, are perceived to be things separable from the body, the life as able to go away and leave it insensible or dead, the phantom as appearing to people at a distance from it. The second step would seem also easy for savages to make, seeing how extremely difficult civilized men have found it to unmake. It is merely to combine the life and the phantom. As both belong to the body, why should they not also belong to one another, and be manifestations of one and the same soul? Let them then be considered as united, and the result is that well-known conception which may be described as an apparitional-soul, a ghost-soul. This, at any rate, corresponds with the actual conception of the personal soul or spirit among the lower races, which may be defined as follows: It is a thin unsubstantial human image, in its nature a sort of vapour, film, or shadow; the cause of life and thought in the individual it animates; independently possessing the personal consciousness and volition of its corporeal owner, past or present; capable of leaving the body far behind, to flash swiftly from place to place; mostly impalpable and invisible, yet also manifesting physical power, and especially appearing to men waking or asleep as a phantasm separate from the body of which it bears the likeness; continuing to exist and appear to men after the death of that body; able to enter into, possess, and act in the bodies of other men, of animals, and even of things. Though this definition is by no means of universal application, it has sufficient generality to be taken as a standard, modified by more or less divergence among any particular people. Far from these world-wide opinions being arbitrary or conventional products, it is seldom even justifiable to consider their uniformity among distant races as proving communication of any sort. They are doctrines answering in the most forcible way to the plain evidence of men's senses, as interpreted by a fairly consistent and rational primitive philosophy.²

Sleep and dreams are also offered as provocative of the dual assumption, because on reflection and upon the testimony of

² Edward B. Tylor, *op. cit.*, 428-429.

others, the sleeper believes he experienced separation from the body. Further, once having made this assumption about humans, it is natural to extend it to animals. Thus :

. . . we have first to inform ourselves as to the savage man's idea, which is very different from the civilized man's, of the nature of these lower animals. A remarkable group of observances customary among rude tribes will bring this distinction sharply into view. Savages talk quite seriously to beasts alive or dead as they would to men alive or dead, offer them homage, ask pardon when it is their painful duty to hunt and kill them. . . .

The sense of an absolute psychical distinction between man and beast, so prevalent in the civilized world, is hardly to be found among the lower races. Men to whom the cries of beasts and birds seem like human language, and their actions guided as it were by human thought, logically enough allow the existence of souls to beasts, birds, and reptiles, as to men. The lower psychology cannot but recognize in beasts the very characteristics which it attributes to the human soul, namely, the phenomena of life and death, will and judgment, and the phantom seen in vision or in dream."³

For a fuller exposition of this theory the student may consult the original work of Tylor, but in so far as his conclusions can be reduced to a few sentences, they are, that in the common experiences of life, sleep, dreams, death, etc., lie the determiners of basic beliefs in souls and spirits.

At this point it may be helpful to note that we are facing a subject in which one may well despair of great accuracy. To learn what anyone believes is a task beset with difficulties; if the reader doubts the statement let him try to discover what his neighbors believe about the spiritual life. To penetrate the beliefs of savages is still more difficult. Miss Kingsley, in writing of the Africans, says that all depends upon one's ability to "think black." In the same way, when among the Eskimo one must "think Eskimo" before he can expect to formulate their beliefs with any degree of precision. Even the most experienced anthropologists will fall short of this ideal. Tylor seems to have sensed these obstacles fully for when dealing with the question as to the universality of the animistic conception he writes :

³ Edward B. Tylor, *op. cit.*, vol. I, 467, 469.

the assertion that rude non-religious tribes have been known in actual existence, though in theory possible, and perhaps in fact true, does not at present rest on that sufficient proof which, for an exceptional state of things, we are entitled to demand.⁴

ANIMATISM

Marett has proposed the term animatism as a name for the vaguer beliefs in the immaterial. He maintains that when primitive man attributes supernatural force or power to material objects, he does not necessarily regard them as possessing spirits. Tylor maintained a contrary opinion; and in justification of this assumption the data on record indicate that some tribes do regard objects as possessing spirits, but the animatistic view seems to be the prevailing one. Anyway, we can in this way dispose of the great mass of charms and similar objects found in savage and other communities—museum collections are usually rich depositories of such materials. The Indians of Eastern and Central United States cherished many “sacred bundles,” most of which contained objects clearly falling into this class. In many cases prayers would be addressed to the power resident in these objects. The so-called fetishes from Africa and the *churinga* of the Australians also belong here. Moving farther afield, the relics of Christian churches, the Torah of the Jews, the prayer wheels of the Mohammedans, the images of the Buddhists, etc., also qualify, since these objects do not have souls of their own, but are imbued with certain spiritual powers. It is true, as just stated, that some primitive beliefs do put souls into material objects; in most of these cases, however, it is the souls of persons that are housed in them.

PROBLEMS IN ANIMISM

Let us now see if we can formulate, in direct simple statements, the problem Tylor set himself. Starting with the assumption that primitive or civilized people everywhere believe in souls and spirits of some kind, one may, on the basis of experience and knowledge of what people do, attempt to formulate the situation, which, human beings being what we believe them to be, may be expected to provoke questions and, ulti-

⁴ Edward B. Tylor, *op. cit.*, 418.

mately, produce answers to them. Tylor proposes that, sooner or later, in every human group, someone will formulate questions along such lines as the following:

What is missing in a corpse?

Why does the sleeper not see and hear what goes on around him?

Where was my body when I dreamed of being far away?

What kind of thing is the part of me that leaves the body at death and in sleep?

Do animals have this same dual existence?

Do the trees, weapons, etc., also have a dual form?

In response to queries like these, Tylor suggests that beliefs take forms which fall into one general class in that they seem to recognize two aspects of living beings, somewhat in the nature of material and immaterial, or perhaps distinguishing between the part of us we call conscious and the part that is not—the usual terminology being body and spirit. He further implies that such beliefs form the core of primitive philosophy, that the phases of culture we call religion, philosophy, and science, in all their ramifications, are present in some degree wherever men are assembled. And, although he does not explicitly say so, he leaves the reader with the impression that he regards it as inevitable that a soul or spirit will be assumed in response to such situations. Carried out to the full, this would be determinism, unmistakable and pitiless, and as unescapable as our most elemental responses to stimuli.

No doubt, a statement of this kind rouses antagonism, since no one likes the idea that he is not free to choose his beliefs. Anyway, these statements of Tylor have been attacked by a number of writers. For one thing, Tylor is charged with rationalism, a term now used widely as a reproach. Its meaning is not always clear, but emphasis seems to be laid upon the idea that only a gifted few ever indulge in the questionable pastime of serious reflective thought. This is not the place to expound the current doctrine of the "irrationalists" as an explanation of social life; we may dismiss it, for the present, and proceed with a summary of the objections to Tylor's theory. First, there is general agreement that the idea of souls in some form is widely distributed throughout the primitive world.

Yet, it is not denied that thought and abstract ideas are universal. What is rejected is that the idea of a soul is arrived at by a process of reasoning such as Tylor has outlined. Yet, if Tylor's so-called rational explanation is ruled out, and these beliefs are viewed as spontaneous, then we must assume spontaneous responses that open the way to reflection and the formulation of beliefs respecting immaterial entities, such as spirits or souls. This may be just as unliked as is the first because of its determinative flavor. No one can be sure of the truth of the matter; like other problems of social origins, this one completely baffles the genius of our time.

Tylor's formulation of the problem is, however, a contribution; but we can go further, for the reality of animism, once an assumption, is now a fact; the present problem is to discriminate between the elements of this complex of beliefs which are universal and those which are not. Then follows the question as to which institutions are based upon or conditioned by these beliefs, what has been their function in society, etc.

OBJECTIONS TO TYLOR'S EVOLUTIONARY VIEWS

We have dwelt upon Tylor's contributions at what may seem undue length, but he raised the problem and so formulated it that it is still unsolved. One of the crucial questions that arises in almost every approach to social problems, is the part played by conscious formulation and direction in the growth of tribal culture. Spencer and Tylor were in close agreement as to why primitive man believed in souls. Wundt, on the other hand, believed their view gave too much weight to the independent attitude of the individual and did not take into account the joint attitude of the group; but he did not take the position that the psychic functioning of the individual is negligible. If one turns to the writings of Durkheim, he will find the author arguing that beliefs and even the form of thought are the outcome of group behavior. Lévy-Bruhl seems to go a step further, denying that logic has any influence on the formulation of beliefs, but agrees that they are composites of the experiences of the group. Turning to the writings of these theorists, the reader can form his own notions as to what is emphasized. It

may be, of course, that the older and more recent students are writing about the same thing, but employing a different terminology. The psychology of Spencer's day used logic for much that is now called intuitive or spontaneous. No one now seriously contends that even the educated habitually think in syllogisms; our organisms function, and we take a specific attitude without knowing just how we came into it.

There is one point of agreement between these older authorities and contemporary anthropologists; each looks upon such concepts as self, soul, matter, spirits, etc., as ideas arrived at by degrees, a process beginning in earliest times. The chief point of difference is that the older school is credited with the idea that in the development of these concepts all peoples followed the same road, and that, in consequence, their respective beliefs could be taken as illustrations of what our ancestors once experienced. This interpretation is opposed by many contemporary anthropologists, some going so far as to deny that anything regarding the past can be interpreted from the present. Tylor and many of his contemporaries believed that present beliefs were the end results of a long series of sequential changes and that civilized man believes today what primitive man once accepted. This implies an order of development to which man is committed by evolutionary processes, a point of view which many anthropologists profess to reject. These differences of opinion may become clearer after we have considered Tylor's method in regarding existing traits of culture as survivals.

THE PRINCIPLE OF SURVIVAL

Tylor seems to have placed great confidence in the principle of survival. To use his own words:

When a custom, an art, or an opinion is fairly started in the world, disturbing influences may long affect it so slightly that it may keep its course from generation to generation, as a stream once settled in its bed will flow on for ages. This is mere permanence of culture; and the special wonder about it is that the change and revolution of human affairs should have left so many of its feeblest rivulets to run so long. On the Tatar steppes, six hundred years ago, it was an offence to tread on the threshold or touch the

ropes in entering a tent, and so it appears to be still. . . . When in the process of time there has come general change in the condition of a people, it is usual, notwithstanding, to find much that manifestly had not its origin in the new state of things, but has simply lasted on into it. On the strength of these survivals, it becomes possible to declare that the civilization of the people they are observed among must have been derived from an earlier state, in which the proper home and meaning of these things are to be found; and thus collections of such facts are to be worked as mines of historic knowledge. In dealing with such materials, experience of what actually happens is the main guide, and direct history has to teach us, first and foremost, how old habits hold their ground in the midst of a new culture which certainly would never have brought them in, but on the contrary presses hard to thrust them out.⁵

He considered games as survivals of serious procedures. It is a matter of common observation that everywhere, primitive or civilized, children play at what the adults do, the serious things of life. The writer has seen American Indian children playing at sacred ceremonies and it is a fair assumption that if such a game becomes standardized and gives satisfaction, it may continue to function long after the ceremonies it imitated cease to function. Also, the game may be borrowed by the children of a neighboring tribe and so start on its travels over a continent. Turning to European games, Tylor in some cases was able to bring historical data to bear upon their interpretation and thus make a good case for them as survivals, but in many other games cited, he could do no more than guess at what had once been the meaning of the procedure. One gets the impression that Tylor believed all games had their origin in ceremonials and in mystic beliefs, and so assumed that his method would give the origin of any game, wherever encountered. In the first place, the assumption that all games were imitations of serious procedures is of doubtful validity. Yet, even were this assumption reasonable, the procedure seems too simple, for unless we know at least a few of the actual steps by which the game in question was arrived at, it is futile to guess in the manner proposed by Tylor.

This is not meant to deny the principle of survival and the

⁵ Edward B. Tylor, *Primitive Culture*, vol. 1, 70, 71.

necessity of taking it into account when dealing with a culture, but as a research method for determining origins, it has serious limitations. Further, the method is based upon the assumption that every procedure had a rational beginning, or that it served some recognized purpose, and its reason for being can be learned by an ingenious analysis of the trait in its present setting. It is true that most modern writers, even those hostile to Tylor, frequently lapse into this method of interpretation, as the reader of anthropological literature may readily observe. The cause for such lapses may lie in that the concept of survival does express what everyone senses as a process in culture; the problem is the same as that found in relationship systems, but the data for survivals in games and social procedure do not lend themselves to the same degree of objective treatment, and so correlations are rarely possible. In other words, one must first prove that a trait is a survival, a thing rarely possible by objective methods.

At this point, it may be well to remind ourselves that Tylor used a similar approach in the study of symbolism in art and the evolution of mechanical devices. We shall turn to these subjects later, but the many attempts to interpret geometric designs as degenerate realistic surviving forms and to derive complex mechanical devices from a series of simple mechanisms has done little more than demonstrate the weakness of the method. The difficulties in each case are the same; logical analysis alone will not suffice to identify a survival. Finally, it seems a just appraisal of the survival concept to recognize its value as an insight into social change. In the broadest sense of the term the survival process is always present, but the principle of survival does not itself point the way to a useful method in research, nor did Tylor succeed in treating the subject with sufficient objectivity to be convincing.

SUMMARY

We have reviewed two important problems developed by Tylor, animism and survival. The former is the name given by him to the general phenomenon of belief in spirits, souls, and immaterial existence. The tendency to view all objects in the

world as animate is noted, but Tylor regards the more specific inclination of all human beings to explain themselves and others of their kind by assuming the existence of spirits or souls, as universal and inevitable. In respect to method, Tylor seems to have been the first to conceive that the beliefs of mankind, as expressed in their philosophy of life, could be taken as objective data relating to the religious conceptions of man. He went farther in conceiving that the current European beliefs about the soul were but a part of a worldwide phenomenon, to be studied by objective methods. However, objections have been raised to Tylor's interpretation of primitive beliefs in souls, on the ground that he over-emphasized the rational aspect of human thought. He was also influenced by Darwin to see in primitive ideas the necessary beginnings of modern life.

The other concept developed by Tylor was that customs now useless are survivals of a procedure since outgrown and forgotten. Examples of such survival can be cited, but the modern point of view is that it is unjustifiable to assume all meaningless customs as survivals. The wide and uncritical use of this method of interpretation has filled our literature with many fantastic assumptions concerning the origins of social procedure and the basis for human behavior.

CHAPTER XIII

MAGIC

The conception of magic as an important problem is credited to Frazer. In the same sense that Tylor gave us a research lead into the insight of animism, so Frazer gives us magic. It might have proved less confusing if Frazer had adopted an arbitrary term instead of the word magic, which calls to mind magicians and a wealth of folklore, the reader automatically reading into it a meaning which is likely to fall short of the Frazer concept. Frazer may be said to have developed the theory of magic by the year 1890. Thus a controversy was initiated which has continued to the present, for the details of which the reader should consult the writings of Lang, Marett, Durkheim, and others, though he may be appalled at the prospect of reviewing so many voluminous publications. Some time may be saved, however, if we bear in mind that more than in any of the subjects so far considered, these voluminous discussions are concerned with definition, as, what constitutes magic? where does it begin? when does it become religion, animism, or some other recognized form of response? This emphasis upon definition may be due to something inherent in magic, in contrast to animism. While one may, for example, have difficulty in defining a spirit satisfactorily, he feels little confusion as to what is meant; but when it comes to magic the meaning seems elusive. Further, the subject was launched in controversy, because animism had been accepted as the basic phenomenon. Tylor, it will be remembered, regarded magical procedure as an expression of animism and so as not especially significant; to him magic was peculiarly primitive, appropriate to such levels of development, and its occurrence in modern society explainable on the principle of survival. Frazer, on the other hand, saw in magic something simpler than animism, something more uniformly distributed over the world and so, as he believed, older,

and the background to all systems of belief. This is quite contrary to the position of Tylor and tends to dispute the fundamental nature of the animistic theory. But Frazer went more deeply into the subject, attempting to demonstrate that the basic ideas in magic are grounded in the psychological processes of association. Whatever may be the ultimate fate of Frazer's hypotheses, his vigorous presentation and the wealth of material cited have not only formulated the problem, but placed the observation of magical practices on the list of important research topics in anthropology. We must, therefore, review the manifestations of magic as a culture complex and evaluate it as a research lead.

MAGIC CHARACTERIZED

To know magic one must experience it concretely, but where such experience is denied, objective descriptions of tribal practices may give some understanding of it. So, assuming that in this, as in all other phenomena so far discussed, there will be tribal and regional differences, we may cite a few examples of tribal procedure.

Speaking of the Crow Indians, Lowie writes :

. . . the picture of the enemy is sometimes drawn near a river bank, with the head nearest the water, whereupon the sorcerer smokes toward it and burns incense. The water comes to wash the image away, and the sooner it does so, the sooner the victim will die. Another informant says that a rock or *bāxe* weed was placed on the picture and in order to blind his enemy the shaman would put ashes or charcoal on the eye of his image. The injury planned would, of course, vary: the shaman would paralyze his victim, strike him with dumbness; deform him, have him killed on a war-party, or cause him to lose his property. . . .

One winter one of these children wanted some berries. Plenty-fingers told them to get him the limb of a cherry tree. When they had brought it, he stuck it into the ground in front of himself, covered himself up and made medicine. When he had removed the blanket, the tree was full of cherries, which the children ate. One of the boys wanted plums and in similar fashion he produced plums. Some of the girls would long for wild turnips in the winter time. He would dig in the ground with his fingers, take

some out, and give them to his children. He could also produce sarvis-berries and other berries in the winter. When people had no meat, they would go to Plenty-fingers and ask him for some. He would order them to get the bark of a tree, cover himself and the bark with a blanket, and when he was done the bark had turned into dry meat, which was given to everyone to satisfy their hunger. He could similarly transform driftwood into animal intestines.

Plenty-fingers was also able to treat illness. Once a man was on the point of death, being just able to breathe. They said, "Call Plenty-fingers." When he came, he bade the other people go outside. Then he was heard singing a bear song. He sucked something out of the patient's skull and something out of his neck and chest. While before the man had merely been able to breathe, he now began to talk and look about and was well. Then Plenty-fingers stuck one finger into the ground, sang a song and pulled out a wild turnip, which he gave the man to eat. He told the people to bring him a plum branch, planted it in front of him, covered himself and the branch with a blanket, and began to growl like a bear. When the blanket was removed, there were plums on the limb, and he fed them to the sick man. Similarly he produced cherries and plums for him. He also stuck his fingers into the ground and pulled out wild carrots (bik-ása'te) for the people he doctored.¹

Anyone familiar with accounts of American Indian life will recognize in these quotations a type which can be duplicated over and over—the stock-in-trade of the medicineman—nor is this type peculiar to the American Indian.

Spencer and Gillen are our best sources of information for Australia. When a man, the Australian native

hears a good deal about magic of various kinds, some of it used to control nature so as to ensure a plentiful supply of food and water, other kinds used to hurt an enemy or to charm a woman.

Amongst other forms he hears a great deal about pointing sticks and bones. . . . The former is nothing more than a small piece of wood, varying in length from three inches up to eighteen, and resembling a skewer in general shape. At one end it tapers to a point, and at the other it is tipped with a little knob of resin to which a strand of human hair string is attached. Usually it is

¹ Robert H. Lowie, *The Religion of the Crow Indians* (Anthropological Papers, American Museum of Natural History, vol. 25, part 2, 1922), 345, 351.

ornamented with knots, or circles, or a spiral groove made with a fire stick, and in addition it is often decorated with white or red bird's-down arranged in various ways. To endow it with evil magic it must be "sung." When this is done the man who intends to use it, goes, sometimes alone, sometimes accompanied by a friend, into the bush, to some spot far away from the camp where he will be free from observation, and placing the stick in the ground, crouches over it muttering some such curse as the following:

Ita pukalana purtulinja apinia-a—"May your heart be rent asunder."

Purtulinja apinia-a intapa inkirilia quin appani intapakala-a—"May your backbone be split open and your ribs torn asunder."

Okinchincha quin appani ilchi ilcha-a—"May your head and throat be split open."

In this way the stick, and the same is true of the pointing bone, is charged with evil magic and is then left in the ground for a few days. The actual pointing may take place out in the bush . . . the man who does this thrusting his beard into his mouth, as the native often does when he is performing any special ceremony in connection with which he feels fierce and savage. All the while he jerks the pointing stick in the direction of his enemy, muttering incantations to the evil magic to go forth, straight, and kill him. Sometimes the pointing is done close to the camp, in which case, after it is dark and while the men are sitting round the camp fires, the man carrying the Irna creeps up stealthily, taking care that no one sees him, until, by aid of the firelight, he can see his enemy's face. Then he stoops down and jerks the stick either over his shoulder or between his legs. The evil magic goes from the point, of the Irna straight to the man, who very soon afterwards sickens and dies, unless his life be saved, as fortunately it often is, by the aid of a medicine man who can discover and remove the stick. In some cases, when the man is ill, the string attached to the resin is slowly burnt in the fire, an act which is supposed to render the death of the man just as certain as the destruction of the string.²

No doubt the most critically minded will grant that a certain similarity runs through these narratives: the individual, or agent, seems to manipulate objects so as to change the usual and expected order of natural events, thus giving evidence of

² Baldwin Spencer and F. J. Gillen, *Across Australia* (London, 1912), vol. 2, 346-347.

extraordinary powers. In most cases the concept seems to be that of superhuman power. The individual longs for the power to bring to pass that which he desires. Seeing others the fortunate recipients of what he most desires, he believes, according to his tribal lore, that this is due to some unseen and unnatural external power. As a rule, the idea is that anyone may enjoy the benefits accruing from the manifestations of this power; it is chiefly a matter of knowing how to invoke it.

Frazer considered magic under two types: "imitative magic" and "contagious magic." It is not always easy to say to which of these a concrete magical practice belongs. Thus, of the examples we have given (p. 223), the first seems to be a case of "imitative" or sympathetic magic, in which class it is usual to place procedures that seem based upon the assumption that whatever is done to the symbol will similarly operate upon the real objective.

By "contagious magic" is meant a procedure which implies the assumption that things which have once been in contact with each other continue to act on each other at a distance after the physical contact has been severed. It is conceived that under this head will fall such examples as the burning of a lock of hair (p. 225) or any object in intimate association with the body of the person against whom the magic worker directs his power.

These distinctions, however, are of doubtful utility, except when one is concerned with the origin of magic, or with the specific psychological responses involved. Any collection of tribal practices is sure to present both aspects of the phenomenon and also magical procedures difficult to place under either of the above heads. It may be sufficient to note that the person practising magic rarely stops with the mere wish that something may strike the victim, but must needs objectify the symbolic procedures by an image, a part, etc.

MAGIC AS A PROFESSION

We have stated that magical practices seem to proceed upon the assumption that some kind of power is invoked to intervene in and to manipulate the natural order of events. The person

who specializes in the invocation of these powers is variously designated in our literature as a medicineman, shaman, magician, sorcerer, etc., these terms having been derived in one way and another from tribal names. These professionals are given to parading their powers before the tribe and frequently indulge in contests to see who can overcome the power of the other. Any tribesman may go to these professionals for aid in causing the death of a rival and likewise the intended victim may appeal to another professional for protection.

Students of magic usually assume that, in a primitive community, specialization of function is upon so low a level that most of what we designate as the learned and skilled professions are practised by a single individual. Thus, it has become a commonplace remark that the functions of seers, scientists, teachers, doctors, lawyers, priests, etc., are all exercised by the shaman or medicineman. In this there is a fair measure of truth. Of the simpler cultures, as those of the Australian, Eskimo, Fuegian, etc., observers are in some agreement as to the vesting of these activities in a single individual, but their testimony emphasizes the magical function, suggesting that whatever other duties the shaman may perform, he is first and above all, a specialist in magic.

Accounts of primitive medicine give one the impression that diseases are regarded as the work of a malicious power and in most cases death is so explained. However, it is doubtful if a general statement of this kind will have universal validity, because diverse concepts of disease occur everywhere, though a survey of the literature will justify assigning the major rôle in primitive medicine to magic. When a man is ill he appeals to those regarded as able to accomplish the extraordinary; likewise, when starving, thwarted in love, going to war, etc., he appeals to the same persons. So the great field for the magician has been and, in many respects, still is, the treatment of the sick and the distressed. Wherever knowledge fails, especially in grave crises, a people resort to magic. If, however, an effective objective remedy for sickness or injury is known, it will be used. Folk medicine is responsible for many beneficial drugs and even the most primitive tribes have some knowledge of surgery and the treatment for broken bones. Distinctions

are sometimes made by primitive peoples between those practitioners who give medicines or practise surgery and those who put their dependence in formulæ, songs, etc., just as we might, in speaking of one class as doctors and the others as magicians. Our interest, however, is now in the practices of magic as a profession.

THE TABOO

Some regard the taboo as negative magic in the sense that by avoiding certain acts the hand of the mysterious power may be stayed. It is true that many taboos are of this character: thus the Eskimo are often cited as an example of a taboo-ridden people, because a failure of the hunters to secure meat and the consequent impending starvation is regarded as due to someone having neglected to observe the taboos governing hunting and the use of food. What we seem to have in this case is a fixed belief that, just as certainly as one event in the natural world follows another, will the failure of the hunter follow any violation of the taboos by any man, woman, or child in the community. Even the dogs must not be permitted to feed upon certain animals at specified times. In many other parts of the primitive world, other taboos are encountered, the violation of which often automatically penalizes the whole community, but in many cases the transgressor alone. Wherever such beliefs hold sway, the response to a calamity is in keeping. If an Eskimo village cannot capture seal, then they say, someone has violated the taboo and the person is sought out, enjoined to come forward and confess, or make restitution. This failing, they will appeal to the "angokuk," or shaman, to find the guilty one, or bring such other power as he may possess to bear upon the situation, for once the seals have been taken away, they must be returned by the same mysterious power, or remain away forever.

In all such cases the taboo obtains its fiat from the belief that the acts of the individual are the initial occurrences in a fixed series of events, the chief factor in which is a superhuman agent. This is the ground for the statement that the taboo is based upon magic. It does not follow, however, that all avoidance is grounded in magic. For instance, such a widely diffused avoidance as speaking to a mother-in-law is rarely connected

with magic in the sense in which we have used that term. In a similar class is the avoidance of many foods, the violation of which may affect the good standing of the culprit. If it should be rejoined that all cases of avoidance are survivals of taboos based upon magical belief, one must still reckon with individual avoidances of all kinds. And once a custom of avoidance spreads in the group, it may soon associate with it penalties and sanctions characteristic of magical beliefs. As in almost every other case, the origin of a taboo is indeterminate, but its place in tribal life may be observed, and it is clear that in many cases the function of certain taboos is to avoid the dangerous operations of any superhuman agency.

In this connection note may be taken of the individual taboos a shaman may impose upon those he aids; thus, in aboriginal America the medicineman will cure the patient by magic and then tell him that in the future he must refrain from some particular food, from using a specific word, etc., that if this injunction is violated the trouble will return. Further, the acquisition of a guardian spirit frequently lays a specific taboo upon the individual, the violation of which will break the bond. That tribal taboos sometimes evolve out of these individual prohibitions is conceivable; but, on the other hand, they may result from the avoidance of a common danger. Belief in magic seems to fill the tribal environment with a host of unseen dangers, to which misfortunes may be attributed; the taboo appears as a device for avoiding them.

ETHNOGRAPHY OF MAGIC

In each tribal group will be found a complex of beliefs embodying, to varying degrees, animism, animatism, religion, and magic. If we concern ourselves with how these beliefs are expressed in the life of the group, then it may be best to consider the whole complex rather than spend our time in analyzing and identifying the traditional types of beliefs, as animism, animatism, magic, etc. Further, by so doing, we shall conform more closely to the anthropological descriptive ideal. So far, no one seems to have made a thorough survey of tribal and regional types of beliefs in magic, but we can safely predict that, as is the case with other cultural problems, each tribal complex of

magical beliefs will have individualities, yet will bear marked resemblances to the complexes in neighboring tribes, which may be expressed as regional correspondences, and finally, for mankind as a whole, these regional types will be basically similar. It is, of course, these fundamental characteristics of magic as a worldwide phenomenon, that were sought by Tylor, Frazer, and others whose works we have cited. There is sufficient literature of this type to evaluate the results of that method of inquiry, but no one seems to have made a comprehensive world survey of tribal types of magic.

Some approach may be made to such a summary view by fixing our attention upon the shaman, the professional director of the tribal magic, who often functions in philosophical and religious matters as well. For purposes of orientation, we observe that wherever he is encountered, the shaman's activities fall under the following heads:

- a. Treating the sick.
- b. Protecting the individual from possible dangers—the "white art."
- c. Enabling the individual to destroy, injure, thwart, or control other persons—the "black art."

The objectives toward which the magic of the shaman may be directed are fairly summarized under the following heads:

1. Control of the weather.
2. Control of the food supply.
3. Combating disease and death.
4. Enhancing the fortunes and gratifying the desires of the individuals concerned.

The emphasis will vary in part according to the tribal culture; as a hunting people may develop magical procedures to make the game plentiful and easy to take without harm to the hunter; a war-like people may have numerous ways of making persons invulnerable, of confusing the enemy, etc., but all these can without much difficulty be listed under the above headings. If, on the other hand, we view the shamanistic procedures by which these objectives are sought, a much more elaborate outline is needed, something like the following:⁸

⁸ For a lengthy description of these methods as employed in the treatment of disease, see John Lee Maddox, *The Medicine Man, A Sociological Study of the Character and Evolution of Shamanism* (New York, 1923).

A. Propitiation:

1. Prayer or appeals to spirits, ancestors, etc., including songs and dances when so directed.
2. Performing ritualistic ceremonies.
3. Making of gifts, offerings, etc., to spirits, largely as evidence of self-denial.
4. Offering of food.
5. Offerings of blood, as in sacrifices, human and animal, self-mutilations, etc.
6. Acquiring a protector, guardian, or totem.

B. Exorcism, or driving away intruding spirits or objects interfering with the well-being of the individual; also in regions where the soul may be stolen away, the process is the inverse one of calling or forcing back the missing soul:

1. By physical force, as pressing, rubbing, beating, working the object out, etc.
2. By sucking, cupping, etc.
3. By invoking one spirit to drive the other out automatically—a formula, a song, a symbol, or even a name may suffice.
4. By the use of fire as the evicting agent: cauterizing, brandishing a firebrand, etc.
5. By the use of water—sprinkling, dashing, etc.
6. By the use of smoke, odors, vile food, etc., to make the intruding spirit uncomfortable.

C. Warding off, or protecting:

1. Charms and amulets: substances, vegetable, crystal, animal, of many forms.
2. Pictures and symbols of "bogies" to the spirits.
3. Songs and formulæ.
4. Keeping of taboos.

D. The "black art" may be the reverse of many of the preceding methods, the objective now being to do harm:

1. Mutilating a symbol of the intended victim.
2. Mutilating part of the body or clothing.
3. Injecting a missile, or "throwing a bone," a stick, etc.
4. Causing misfortune to the victim's family, relatives, possessions, etc.
5. Securing hypnotic power over.
6. Soul capture or stealing.

However, such an outline is but a sort of skeleton for a summation of all the magical practices found in the world, as far

as these are common to all tribes and their regional characteristics. The procedure of the shaman is, first, to analyze the situation or to diagnose the case, according to his teaching and the background of tribal belief. Once he has come to a conclusion as to the spirit or power causing the trouble, he chooses what is believed to be the most effective procedure. This procedure is, as we have said, what the anthropologist observes and records, the most objective data he can obtain. The ethnographic method is to compare the tribal procedures, and formulate the regional types, until a world view has been attained. No one has done this for us, though a few regions have been well treated.

For example, Dixon reviews the shaman of North America indicating, first, that the shaman is predominantly male, but that women do sometimes function in a major capacity. A person becomes a shaman in no one way; the methods vary, and may be through inheritance, social selection, accidental calls, or self-seeking. His power is not so much taught as derived from spirits, the dead, and the gods. Supplication and fasting in solitude are the usual procedures.

So far, then, as regards the making of the shaman in America, we may say that the position is most commonly filled by men, is very commonly one of his own conscious seeking, and that he obtains his powers through the mediation of a supernatural guardian spirit, generally animal in character, with which he strives to come into communication through solitary fasting, bodily cleanliness, and gifts, and that he receives more or less direct and open tutelage from the older shamans in the practices of his adopted art.⁴

The American shaman, for one thing, functions as the healer, and as such, he makes little use of drugs or herbs, but proceeds largely on the theory that sickness results from objects which he extracts from the body. He is also a sorcerer in that he may magically produce the sickness, more often than not by "shooting" it in. He also prepares charms of great variety, occasionally acts as seer and prophet, discovers the guilty, etc. Going into a trance is far from universal, but does occur. In many parts of the world, the priestly function of the shaman

⁴ Roland B. Dixon, "Some Aspects of the American Shaman" (*Journal of American Folk-lore*, vol. 21, 1908, 1-12), 5.

looms large, but in America this is weakly developed, or tends to be relegated to a distinct priestly class. On the other hand, the shaman is usually the wise man and the educator. Among his social functions are those of amusing and astounding the tribe by tricks.

In large degree, the shaman in America may be said as a type to exemplify one of the most characteristic attributes of the Indian as a race. For the shaman, at least in his lower stages, like the ordinary man, obtains his mysterious powers from supernatural helpers, acquired through fasting, dreams, and visions; he differs from the ordinary man chiefly in the extent and character of the help secured. To the one his manitou or personal totem is something sacred, awful called on only in times of direst need, a single guardian, whose identity is jealously concealed; to the other not one but many spirits minister, with them the shaman comes to be almost on terms of intimacy, and of them he requires constant and varied aid in the calling by which he makes his living. Inasmuch, therefore, as one of the most striking characteristics of the American Indian lies in the wide prevalence of the idea of the personal manitou, we may find in the development and in the person and position of the shaman a significant instance of the unity of race feeling which can be recognized throughout almost the whole of American culture. As compared with their representatives in other parts of the world, the shamans in America seem to show, both in their making and in their whole character, less reliance on the dead, the ancestral spirits, than do those of other regions. This lack of dependence upon the dead is an example of the general weakness of the whole idea of ancestral worship in America as compared with Polynesia and large parts of Asia.

The American shaman thus, in his lack of dependence on ancestral spirits and the greater deities, and in deriving his powers from animals and natural phenomena, exemplifies strikingly the spirit of the American Indian as a race; and in the general uniformity of these characteristics throughout both continents serves as an illustration of the belief that in spite of minor differences as among themselves the culture of the American Indians is fundamentally one in type, influenced perhaps slightly here and there by other cultures, but yet in spite of this autochthonous.⁵

The term shaman is said to be a Siberian word and so we may look to that region for an interesting type. Miss Cza-

⁵ Roland B. Dixon, *op. cit.*, 12.

plicka⁶ gives a detailed survey, indicating the prime requisite of a professional shaman to be a supernatural gift or experience. The functions of the shaman are classed as professional and family. One feature of Siberian shamanism is the emphasis placed upon fits, paroxysms, etc., the culture of these tribes as a whole giving a large place to such phenomena.

Most Siberian tribes regard the universe as motivated by two groups of powers, those that make for evil and those that make for good. The main function of the shaman is to combat the powers for evil or to invoke them according to the result desired. His chief equipment is a special form of drum, but he works his power by means of trances and fits. In fact, one does not qualify as a shaman until he manifests seizures or fits, but having once done so, he is thenceforth a shaman even against his will. During these trances or seizures, the soul of the shaman is supposed to leave the body and to visit the worlds above and below, to commune or intercede with the good and evil spirits, as the case may be. Nevertheless, though a shaman is "called" by seizures, the initiate then goes through a long period of training, as in any other profession. Both men and women may become shamans.

The characteristics of Australian magic have been indicated in the preceding pages. Perhaps the most striking characteristic of the Australian shaman is that he is not an exceptional person, for practically every adult constantly practises magic. Yet, there is some specialization in "bone pointing" and in discovering which person has magically caused sickness or death. The outstanding belief of the Australian shaman is that his power lives in quartz crystals. Such crystals are taken by sleight-of-hand from the body of a sick person and exhibited as the cause of the disease.

The reader who regards these general accounts of the shaman and reads some of the literature, noting his methods, his qualifications, etc., will, no doubt, agree that there is great tribal unanimity, that it is only the tribal and regional preferences for certain procedures that are different. Thus, throwing, or shooting objects into the body, rubbing, and sucking them out,

⁶ M. A. Czaplicka, *Aboriginal Siberia. A Study in Social Anthropology* (Oxford, 1914).

maltreating an image or a part of the person, are rarely absent in tribal practice, though some of them are in the minority. In substance these practices seem to express a remarkable uniformity and to result from natural responses in community life.

MAGIC AND ANIMISM

Tylor considered animism a belief in souls, or spirits. Many later writers have labored to distinguish between well-formulated beliefs in souls and beliefs in unseen agents; the feeling of duality as material and immaterial. From an ethnographic point of view some such distinction may be desirable, but that there will ever be unanimity of opinion as to the realities upon which such distinctions are based, is unlikely. For our purpose, however, it may be sufficient to assume that animism and magic are two different beliefs, the one positing the existence of souls that animate bodies, the other assuming more or less capricious agencies that manipulate the order of nature. Naturally, each tribe maintains a more or less different formulation of these beliefs, and shows individuality in practice.

The natural question to ask, when considering the relation of magic to animism is, which is the older? If, as Tylor assumed, magic developed from animism, then animism was the first to appear among tribal beliefs. Wundt, it will be remembered, also favored this idea, viewing magic and its allied concepts as secondary, or as derived from the basic beliefs in animism. The strength of Wundt's view, and also of Tylor's, is in the idea that the consciousness of self and the experience of causing things to happen, or in willing, is the condition under which the concept of a soul emerges. But Frazer and others see in the latter, the experience of volition, the primary factor in magic, and so claim that magic is the essential first step in a development that leads to the formulation of animistic beliefs. Frazer has emphasized the universality of magic, in that every observer seems to have attested to its presence, so that no tribe or people can be declared innocent of such practices, whereas examples of animism often fail to be recorded, and occasionally its presence is denied. Of course, one difficulty may lie in that belief in magic is readily expressed in easily observable concrete

procedures, whereas belief in souls is more abstract and conveyed in words rather than in acts. It is much easier for a traveler or a missionary to observe magic than to grasp the full meaning of what a native says. Tylor regarded the placing of objects with the dead as objective evidence of animism, and if this is accepted as a practice based upon animism, then animism is well-nigh universal also. Too much weight, therefore, should not be given Frazer's claim that magic has a wider distribution, and specific statements as to the absence of the dual conception of body and soul by observers should also be taken with reserve. It may not be a matter of much moment which of the alternatives is true, because in tribal life there are complexes of procedures and belief, some of which seem to have an animistic core, while in others the magical dominates. That the two overlap and that they are enmeshed with what is designated as religion, cannot be denied. Among some tribes these beliefs have become so systematized that magic seems to have reached the level of a world theory, postulating powers that move independent of human volition, accompanying which we find beliefs in souls as mere complements of the body and, like everything else, fully subjected to the powers above or behind phenomena. Judged from this point of view magic is the larger phenomenon and would embrace animism in the sense that it embraces everything.

However, here, as elsewhere in this volume, we are dealing with institutions as realities in the tribal community, such as the practices making up the procedure in disposing of the dead, the protection of the community food supply by the observance of taboos, etc. In contrast, most theories of animism, magic, totemism, etc., have been formulated to meet our universal demand that every event have a cause, or a meaning.

THE ALL-PERVADING POWER

In a preceding section we stated that magic seems to involve the concept of a power that pervades all things. In the literature of the subject occur special terms for this concept: as in aboriginal America, the Iroquois *orenda*, Algonkin *manitou*,

Siouan *wakonda*; in the Pacific Island area, *mana*; in China, *Tsing*, etc. Almost everywhere conceptions of this nature are encountered. The reader should consult the literature for a full understanding of the matter, but the following quotations may serve our present purpose. Hewitt, trying to express the Iroquois Indian idea of *orenda* says:

To savage minds it is the executive power of men and devils, angels and gods; it can destroy the living and can as well bring back to life the dead; in fact, it is omnipresent, omniscient, and omnipotent; enchantment, exorcism, the evil eye, relics, holy springs, ordeal, bedevilment, and all the arts of soothsaying, are one and all activities arising from the faith and trust in the efficacy of this subsumed magic potency or *orenda*.

Thus, in the preceding discussion, it has been found that among the Iroquois *orenda*, a subsumed mystic potency, is regarded as related directly to *singing* and with anything used as a charm, amulet, or mascot, as well as with the ideas of *hoping*, *praying*, or *submitting*.⁷

Jones, writing of the Algonkin *manitou* states:

It has thus been observed that there is an unsystematic belief in a cosmic, mysterious property which is believed to be existing everywhere in nature; that the conception of the property can be thought of as impersonal, but that it becomes obscure and confused when the property becomes identified with objects in nature; that it manifests itself in various forms; and that its emotional effect awakens a sense of mystery; that there is a lively appreciation of its miraculous efficacy; and that its interpretation is not according to any regular rule, but is based on one's feelings rather than on one's knowledge.⁸

Hartland, discussing the Melanesians, writes:

The Melanesian mind is entirely possessed by the belief in a supernatural power or influence, called almost universally *mana*. This is what works to effect everything which is beyond the ordi-

⁷ J. N. B. Hewitt, "Orenda and a Definition of Religion" (*American Anthropologist*, n. s. vol. 4, 33-46, 1902), 43.

⁸ William Jones, "The Algonkin Manitou" (*Journal of American Folklore*, vol. 18, 183-190, 1905), 190.

nary power of men, outside the common processes of nature ; it is present in the atmosphere of life, attaches itself to persons and to things, and is manifested by results which can only be ascribed to its operation. When one has got it he can use it and direct it, but its force may break forth at some new point ; the presence of it is ascertained by proof. A man comes by chance upon a stone which takes his fancy ; its shape is singular, it is like something, it is certainly not a common stone, there must be *mana* in it. . . . Having that power, it is a vehicle to convey *mana* to other stones. . . . But this power, though itself impersonal, is always connected with some person who directs it ; all spirits have it, ghosts generally, some men. If a stone is found to have a supernatural power, it is because a spirit has associated itself with it ; a dead man's bone has with it *mana*, because the ghost is with the bone ; a man may have so close a connexion with a spirit or ghost that he has *mana* in himself also, and can so direct it as to effect what he desires ; a charm is powerful because the name of a spirit or ghost expressed in the form of words brings into it the power which the ghost or spirit exercises through it. Thus all conspicuous success is a proof that a man has *mana* ; his influence depends on the impression made on the people's mind that he has it ; he becomes a chief by virtue of it. Hence a man's power, though political or social in its character, is his *mana* ; the word is naturally used in accordance with the native conception of the character of all power and influence as supernatural. If a man has been successful in fighting, it has not been his natural strength of arm, quickness of eye or readiness of resource that has won success ; he has certainly got the *mana* of a spirit or of some deceased warrior to empower him, conveyed in an amulet of a stone round his neck, or a tuft of leaves in his belt, in a tooth hung upon a finger of his bow-hand, or in the form of words with which he brings supernatural assistance to his side. If a man's pigs multiply, and his gardens are productive, it is not because he is industrious and looks after his property, but because of the stones full of *mana* for pigs and yams that he possesses. Of course a yam naturally grows when planted ; that is well known ; but it will not be very large unless *mana* comes into play ; a canoe will not be swift unless *mana* be brought to bear upon it, a net will not catch many fish nor an arrow inflict a mortal wound. Such a power or influence as this is of course not physical, though it may show itself "in physical force or in any kind of power or excellence which a man possesses." Finally, "all Melanesian religion consists, in fact, in getting this *mana* for one's self, or get-

ting it used for one's benefit—all religion, that is, as far as religious practices go, prayers and sacrifices.”⁹

It is this vague groping, on the part of primitive man, for a common attribute of the world and self that seems to lead to the notion that a power works for his good and evil, a power he can manipulate if he learns how to do it. Magic is the universal method employed.

MAGIC AND SCIENCE

Science is often said to be the new magic of our day. A number of able scholars, Tylor, Frazer, Marett, etc., regard magic and science as “birds of a feather,” whereas others rise in indignation at the suggestion, classing them as antipodal. The dispute hinges partly upon definition and partly upon the regard given to the function of the two institutions in society.

One of the chief reasons for opposing the idea that magic and science are functionally the same, lies in the contempt in which the term magic is now held. Thus Tylor, Frazer, and others make a good case for the unity of magic and science by showing that in both, immutable laws are believed in; that the mind works alike in each, dealing in causes and effects, and, further, each follows the principle of experimentation in its broadest sense. A person seeking a way to cause his enemy to fall at a distance may approach it from many assumptions: a scientist most likely begins with basic assumptions as to physical laws and may set up experiments with electricity and other waves in the hope that he will chance upon a new relation of the forces involved; a primitive starts with the assumption that an invisible power can be invoked by an unknown procedure, and sets out to try modifications of procedures believed to function in other situations; as ethnographical data show, he frequently chooses lightning as the phenomenon with which to experiment. Those who regard the one as magic and the other as science, say there is nothing in common here because the values of the methods for setting up and checking the experiments are not

⁹ Edwin Sidney Hartland, *Ritual and Belief, Studies in the History of Religion* (London, 1914), 49-50, Quotations from R. H. Codrington, *The Melanesians, Studies in Their Anthropology and Folk-lore* (Oxford, 1891), 118 ff.

comparable. However, this contempt for the methods of primitive man and for his basic assumptions should not blind us to the apparent identity of psychological procedure. This is what Tylor seems to have had in mind when he spoke of modern science as an improvement on primitive magic.

One difficulty in dealing with this subject is that we speculate as to how primitives systematize their beliefs and purposes. Few people have lived with any primitive group long enough to earn the right to speak upon this subject, but when such persons do speak, they are usually brief, or indicate that in so far as they could discern, the mind of the primitive worked about like that of the observer. This is what most theoretical writers have assumed, but, on the other hand, these observers of primitive life often set up an ideal of philosophic insight and logical consistency often far above the average attainment of civilized man. Perhaps this is why the stigma of rationalism is so often cast at Tylor, Spencer, Frazer, etc. But after all, what is the truth of the matter? This is just as much a problem now as it was in Tylor's day, notwithstanding the pages and pages of printed data as to what primitives do and believe. Among those who come nearest the crux of the matter are those who assume the attitude of an understudy to a tribal seer. Those who have had this experience may be expected to have at least some dim realization of where the solution lies. In such cases as here cited, the European and the primitive differs in what he takes for granted, or does not question in his culture; but the European will often be surprised to note how completely his primitive teacher realizes the gulf between them and how ingenious he sometimes is in seizing upon and explaining the commonplace, but basic assumptions, in his own culture. In cases of this kind he generalizes, or repeats fundamental concepts on the theories of life taught him by his own tribal teachers. Hence, it is obvious that somebody, somewhere, attempted to systematize and interpret the complex of beliefs and practices in the tribe. In anthropological literature one reads the records of these formulations and descriptions of observed practices. The impropriety of accepting the native explanations of the origin of any practice is now generally conceded, but the primary question whether the first step in the initiation of the

tribal pattern was a matter of thinking from effect to cause, or whether the association was wholly external and purposeless, still remains unanswered. This is, of course, a troublesome psychological problem which had best be left to specialists in that field. Even so, its answer might not help us in arriving at an understanding of the function of magic in the life of the group. If magic in the large sense is found everywhere, even among ourselves, then we have another universal phenomenon, and if it follows that wherever humans are gathered together, we may expect magic in some form, then we are face to face with one of the fundamentals.

These are but suggestions of how the question as to magic and science may be approached. No one has claimed that animism has contributed much to science, but, on the other hand, it is at least the background to philosophy and the large concepts of matter, force, vitalism, free will, soul, etc. It has enriched literature and art; figurative and poetic speech is in large measure based on animistic materials, and even science frequently resorts to the use of the animistic vocabulary to make itself understood. Magic, on the other hand, frequently shows unmistakable tendencies to postulate an unfailing order of events, a fatalism not unlike that assumed by science. Magic assumes a source of power, which through trial and error, may be brought to do our will, and in that sense takes on the plumage of science. Savage magicians have frequently used physical and chemical reactions to demonstrate their beliefs, as in the fire walk, plunging the hands in boiling water, etc. One thing is clear, however, the primitive scientist and the magician were rarely differentiated by the community.

In this connection, we may be reminded that one striking difference between primitive and civilized man lies in their methods. Time after time, it has been demonstrated that when civilized man seriously undertakes to compete with the savage he can outshoot, outdistance, and over-reach him point by point and when analyzed, the chief factor is always found to be superiority of method. The civilized techniques for meeting a situation, for analyzing and directing one's forces, are far in advance of the primitive. Some people decry the idea of progress and evolution in society, asserting that the ratings,

civilized and primitive, are pure fiction, but the history of knowledge reveals a relatively steady advance in the understanding and mastery of nature and of man himself. It may be correct to say that at one end of this series stand the methods of magicians and at the other, the wholly different methods of science; but we suspect that the process has been one of specialization and refinement rather than of substitution for one another.

PLACE OF MAGIC IN TRIBAL LIFE

This brings us to the point of trying to realize the function of magical procedures in the tribal community. Some have limited the definition of the term magic, to refer only to beliefs and practices that were common to the whole tribal personnel. One who has carefully observed a tribal community has little sympathy with such a distinction, because it is rare that any belief or practice can be said to be equally associated with each tribesman. There are usually doubters and non-conformists to disturb the even flow of life; there are also geniuses as well as morons and the sincere and the treacherous. It will be more profitable, therefore, to hold to the general characterization we have formulated, and to attempt no distinction upon the degree to which the tribesmen agree among themselves.

On taking up residence in a tribal community one soon senses the presence of a system of magic. Every field anthropologist knows that his tolerance by the group will depend upon the course of events and the magical system of the tribe. Should someone die or an epidemic break out, the inference may well be that his coming was the cause of the trouble, or they may go so far as to assume that the anthropologist is working magic against them. The writer once heard a veteran of Indian wars tell how hostilities were once started because the carpenter of a military post from which the Indians were supplied with coffins, undertook to anticipate the demand by making up a stock of assorted sizes. This was observed by the Indians and interpreted as preparation for the burial of those soon to be killed by the magic of the White man. To them, this was a correct interpretation, conforming to their belief respecting similar

actions on their part, and their only hope in this case was to kill the White men before the spell was set in motion. The history of White contact with natives everywhere yields a wealth of similar experiences. In part, magic is a pattern of interpretation and procedure when confronted by a new mystery. When a taboo has been evolved, it becomes a device by which a dangerous situation is to be avoided. To meet special and unexpected situations, the tribesmen seek aid from their leaders and at this point the shaman steps in. He renders a real community service, not very much different from that of the policeman, or the local physician. We can conceive that every primitive, however lowly, would subscribe to the maxim, "when in danger, do something." What he does, will depend upon the patterns in his tribal culture, particularly when the danger is invisible or wholly imaginary. If we have correctly stated the situation, magic furnishes the pattern for the "doing of something" or meets a real need in the community. The urge to find the right method seems to be evident everywhere from the days of cave man to the present.

In this instance, however, we set out to consider the place of magic in the community; our view of it, though hazy at best, will be clarified by attempting to answer the query: Does the savage ever respond to happenings in any way, but through magic? Merely a thoughtful perusal of the literature will demonstrate that he does. Magic or no magic, he believes in "keeping his bowstring dry," like a famous old religious leader who took good care of his powder. The savage does order a part of his life by what we call "common sense." The physical conditions necessary for kindling and maintaining a fire are recognized and are not normally associated with magical ideas, so far as the evidence goes. Called upon to explain why fire exists, he may resort to magical conceptions, as did our ancestors, but he does seem to segregate many things in a class apart from the realm of magic. This aspect of the matter has been discussed by Carveth Read.¹⁰ "With the savage . . . common sense, Magic, Animism . . . these are the three great congeries of ideas that compete for the control of his thoughts in his interpretation of the world."

¹⁰ *Man and His Superstitions* (Cambridge, 1925), 40.

One might truthfully add that to varying degrees these also compete in the thoughts of civilized man. Part of the difficulty in forming a satisfactory notion of the part common sense plays in all the vagaries of life is that it is so integrated with magic, that no one can be sure where one begins and the other ends. One may doubt that the leaders in tribal thought in any tribe will fail to feel a difference with respect to the reality of the common sense world and the realm of magic and animism.

Anyway, what Carveth Read had in mind was that it would be far from the truth to assume that primitive peoples do not distinguish between the inevitable order of nature and such procedures as we have pronounced magical. The writer once watched some American Indians, curious spectators, as a trader was installing an electric cigar lighter. When everything was complete, the instrument was tried. The Indians were awed and pronounced it magic; but some weeks later, they had come to regard it as a mere mechanical contrivance. In short, what was once viewed as pertaining to the invisible powers, had now taken its place in the ordinary affairs of life as a mechanical device. This is not a unique case; the history of native adjustment to the ways of civilization will furnish other examples. Even a casual acquaintance with primitive peoples will show clearly a recognition on their part of a difference between the inevitableness of such effects as burning by fire, the falling of an unsupported object, of death, of hunger, etc., and the effects of magical procedures. In other words, he tends to regard the world of spirits and myths as somewhat apart from the sterner realities of life. In his mind the two things are not identical. In the everyday routine of life he expects fire to burn, want to bring starvation, and death to stalk through the camp, with certainty. He is far less sure that any magical procedure will be followed by the desired result; or we may say that, while every member of the tribe will agree to the first, he will vary or qualify his beliefs respecting the latter.

The community will feel the need of magic only to the degree to which their culture demands it. Among some Australian tribes, for example, almost every action in life is associated with magic and one may expect that in such a community where sickness, death, and all the smaller ills of life are regarded as avoid-

able by magic an improvement in the methods of magic will be a public boon. So we read:

Possibly the head man of the group of natives inhabiting that part, being of an ingenious turn of mind, set himself to work to invent some specially effective piece of apparatus wherewith to injure his enemies; for it must be confessed that, though he has many good points, the Australian savage is particularly fond of injuring an enemy when the latter is unable to help himself. A man who can invent any implement which is, rightly or wrongly, supposed to be especially effective and deadly, is regarded as a really great man and a benefactor to his people, in much the same way in which, among civilised nations, a Krupp or an Armstrong, a Maxim, a Brennan or a Whitehead, is regarded as one who has aided the particular nation with which he may be associated.¹¹

Finally, in social anthropology, the question often arises as to whether a given culture complex is social or anti-social. Magic has frequently been pronounced anti-social and, therefore, objectionable in any kind of society. This, like most statements of the kind, is too sweeping and too highly colored by our own sense of values. All magic directed toward the well-being of the community is social in intent and even the "black art" may be so, provided the community is benefited by what it does to the individual. The modern objection to magic is not based upon the idea that all magic is anti-social, but upon the belief that it is inefficient as a method.

MAGIC AND RELIGION

We have dwelt upon magic not because the theories of its nature and origin seem of great importance, but because the operation of magic in primitive communities is typical of community life everywhere. Anything that plays so large a rôle must be closely examined in any approach to the social problem. There is reason to suspect that the complex of beliefs denoted by the terms, magic and animism, bears an intimate relation to religion. It is true that the special treatises on religion are far from consistent in their attitudes toward magic,

¹¹ Baldwin Spencer and F. J. Gillen, *Across Australia*, vol. 2 (London, 1912), 348.

some denying that the two have anything in common; but a review of the data on religious practices among primitive tribes shows how difficult it is to differentiate them clearly from magic. What is meant by religion, is a question one may defer for the present. On the other hand, if one fixes his attention upon ceremonial practices, he readily notes that these are interwoven with magical concepts and practices. In some parts of the world, where sacrifices are in order, a person will give a finger to the gods; certain Indian tribes in both North and South America make this sacrifice to the sun, expecting in return protection from danger and, in some instances, asking that power be conferred upon the suppliant to practice magic. Perhaps the logically minded may be content to say that one of these is religion and the other magic, but the primitive would probably scorn such a distinction, the sun to him being a source of supernatural power.

SUMMARY

It appears, then, that magic is a term used for a method of procedure highly characteristic of primitive communities, but by no means absent in civilized society. It seems to us like a childish game in cause and effect, because we know better. There is no great difficulty in observing and describing what is done in a given community when a concrete situation arises, but to interpret this in terms of psychological or social response is still baffling. The chances are that the definitions of magic so far given are inadequate and in part misleading. We can, at this time, feel reasonably sure that one of the most widespread responses of man seems to be his awareness of an external power, which may remain undifferentiated on the one hand, or be rationalized into a system of powers on the other. This may or may not play a large rôle in what we have called magic, for viewing the practices of the shaman in the large, he seems to be groping after the unseen by acting out the procedures that work among the seen. Thus, he knows that he can get a point out of a wound by pressing, sucking, etc., and so, with the same technique he pursues the unseen cause of a pain. When he seeks the unseen, we call it magic, when extracting an

observed object, primitive surgery. If, then, we seek a meaning for the term, we find ourselves involved in a matter of values; common sense and science, we admire; magic we abhor. It has been assumed that a kind of animistic philosophy is at the bottom of magic, belief in a capricious living power that might be persuaded to do one's will, but also the contrary; a theory that there was an order in nature, which if one had the requisite knowledge, he could manipulate as precisely as a door may be opened and closed. In each tribe occur procedures calling for these theories in turn, but we cannot be sure that they are recognized by the native with sufficient clearness to lead to the creation of new procedures. In short, the efficacy of these theories as revealing origins, or the "reasons for being" of magical procedures, may well be doubted. They may equally well appear as universal community responses and later be dignified by the formulation of a tribal explanation, if the need of such is present. The problem in magic, then, is, aside from the recording of more data, to study the responses entering into these primitive procedures.

CHAPTER XIV

MYTHOLOGY

The serious study of mythology was an outgrowth of the linguistic school mentioned in an earlier section, for the investigation of Indo-European languages led to the collection of old documentary materials, and thus to a knowledge of mythology. The first definite step in the direction of mythology as a science was taken by the Grimm brothers, who discovered in the folklore and sacred mythologies of Indo-European peoples similarities and identities quite like those in language. Not only were many of the folk tales they examined obvious versions of a single original narrative, but many mythical heroes, though appearing under various local names, seemed to be identical in origin and attribute. This discovery was about as stimulating as the earlier lead to the classification of languages, because it held out the promise of an empirical approach to the origin of the folk beliefs not only of Europe, but of the world as a whole. Thus not only was a vast field of inquiry revealed, but, since language and religion were involved in myth, an attack on the whole complex of primitive thought and belief was stimulated. Origins were then the goal of all research and so there arose new hope that at last the enlightened world was approaching the heart of the problem, the reconstruction of the original human community in which might safely be postulated the basic ideas and thoughts, the stuff of which all mythologies and beliefs were made. The preliminary work of the Grimm brothers bore quick fruit; in 1856 Max Müller brought out his volume of *Oxford Essays* setting forth the principles of interpretation to be pursued in such researches. That a general movement was under way in the intellectual world is clear, because in 1859, Kuhn, in Germany, exemplified the same methods in *The Origin of Fire and the Drink of the Gods*. Thus, the science of comparative mythology was elevated to the level of a world

movement. In America, also, after the close of the Civil War, attention was turned to the mythology of the Indians, the outstanding leader being Daniel G. Brinton of Philadelphia.¹

Eventually folklore societies were organized in Europe and America, and today, folklore and folk songs are special avenues of approach in many kinds of social research. Any kind of community study, among people of whatever character, makes large use of such materials. However, the hopes of Müller, Kuhn, and their followers, were not realized; mythology did not lead directly to the secret of culture. But out of it all has come something substantial. In the New World, the gathering of tribal mythologies was greatly stimulated; in Europe, the use of primitive materials in the study of religion increased; in Germany, there sprang up the folk psychology school, which sought a more psychological interpretation of these materials; finally, Tylor's theory of survival and of animism can also be listed as an outgrowth of the movement, though not wholly dependent upon it.

CONTENT AND RANGE

Perhaps the best approach to an idea of what constitutes the mythology of a tribe is through the published examples. Many tribal collections have been published, but not one of these is absolutely complete, that is, it does not contain all the narratives known among the tribe members; yet, some collections of mythology are nearly complete within the limits set by the collector, who in every case exercises some selection. Thus, for the most part, the collector excludes all tales that relate to persons now living; if the tribe is warlike, many warriors have one or more stories of their own exploits, and anyone having an unusual experience will also have a story, but these and the accounts of individual emotional and religious experiences are usually excluded. The collector usually seeks narratives that relate to the distant past and to an order of life somewhat different from the present, one is tempted to say, pertaining to the realm of the "make believe," but while tribesmen have fre-

¹ *The Myths of the New World* (Philadelphia, 1896); *American Hero Myths* (Philadelphia, 1882).

quently been observed to take such an attitude toward some tales, they held others to be true statements of what had occurred. We should not therefore commit ourselves to interpretation in advance, but should take mythology as it is found. As an example of tribal mythology in America, we may cite a collection from the Menomini tribe.²

These Indians believe that their folklore and myths fall into four classes: sacred myths, trickster myths, "fairy tales," and "true stories." Finally, the investigator segregated a group of tales which the Menomini borrowed from the Whites since the colonization of America. In all, the Menomini collection contains 134 narratives in the above classes, as follows: (a) sacred and trickster myths, 25; (b) "fairy tales," 42; (c) true stories, 62; (d) European derivatives, 5. Skinner believed that this collection contained about all the folklore and mythology current in this tribe in 1910-1914. As this total approximates that for a number of other tribal collections, it is indicative of the volume of mythology an ordinary tribe can conserve.

Turning now from volume to subject matter, we find that class *a* and *b* deal with the creation of the world and a few similar topics, but refer mostly to the actions of a culture hero, or a god, who is held responsible for the present order of life. The third division, spoken of as "fairy tales," comprises a miscellaneous collection partly humorous, but in all of which there are magical practices on the part of persons and animals, quite out of keeping with everyday experience. The class, "stories true to life," deals with adventures, ghosts, visions, etc. We see, then, that this collection of narratives corresponds in range to a national literature. If tribal historical legends and current autobiographies had been added to the above, the unwritten literature of the Menomini would have been fully covered. Yet, something remains, because the various ritualistic cere-

² Alanson Skinner and John V. Satterlee, *Folklore of the Menomini Indians* (Anthropological Papers, American Museum of Natural History, vol. 13, part 3, 1915). For similar fairly complete tribal collections, see Robert H. Lowie, *Myths and Traditions of the Crow Indians* (Anthropological Papers, American Museum of Natural History, vol. 25, part 1, 1918); George A. Dorsey, *The Pawnee Mythology* (Carnegie Institution of Washington, 1906); Waldemar Jochelson, *Religion and Myths of the Koryak* (Memoirs, American Museum of Natural History, vol. 10, part 1, 1905); and James Teit, *Mythology of the Thompson Indians* (Memoirs, American Museum of Natural History, vol. 12, part 2, 1912).

monies of this tribe contain songs and speeches which are largely fixed in outline. This, however, brings the picture to a fair state of completion and gives the general outline of what may be expected in a tribe living under similar conditions.

Finally, returning to a consideration of the number of tales and counting narratives and rituals of fixed form, and known to more than one person, it seems fair to estimate the lore of this tribe at about 150,000 words. The adult population of the tribe at the time of making this collection was estimated at 810. Elsewhere we have shown that tribal groups are never large, the Menomini being near the average, and since the number of myths in fairly complete collections for several other tribes of Indians is comparable to the number given for the Menomini, the suggestion is that we have here a hint as to the approximate limit to the amount of lore a tribe can carry under primitive conditions.

STYLE AND STRUCTURE

Narratives, whether written or carried in the mind, must, first of all, have a plot. Students of mythology recognize tribal literary styles and qualities, but social anthropology has little interest in them. It does, however, concern itself in some detail with the structure of myths. Thus, Swanton³ in his study of Haida Indian mythology observed the tendency to use type incidents in building up a tale. Several tales known not only to the Haida, but to neighboring tribes, made use of such incidents as "the man who married a bear," "the magic feather," "the boy who was abandoned," etc. Also, in Skinner's study of Menomini mythology such incidents are listed.

1. Animal Foster Parents. A child, lost or deserted by its parents, is adopted by animals who impart to it certain of their powers or attributes which serve it in good stead later on.

2. Animal Wife or Husband. A human being marries an animal by whom a child is born. One parent finds life with animals or people intolerable, and leaves, taking the offspring, who has superhuman qualities. . . .

³ John R. Swanton, "Types of Haida and Tlingit Myths" (*American Anthropologist*, n. s. vol. 7, 94-103, 1905).

3. The Contest Motive. More common than either of the preceding are stories woven about contests between either individuals or groups. These are races, games, or endurance tests.

4. Violation of a Taboo. A man's familiar enjoins him not to do a certain thing; he disobeys and is punished, often by being turned into an animal.

5. Sun-Shover. The villain, to prolong the day, and delay the hero, shoves back the sun with his bow.

6. Bead-Spitter. As the title implies, the spittle or excrement of the hero is beads.

7. Monster and Thunder Contest. The thunderbirds are constantly at war with the powers beneath, particularly the horned snakes. This idea occurs frequently in the stories.

8. The Sacred Dreamer. A man imbued with sacred power performs a series of marvelous acts, usually freeing the world of demons.

9. The Monster Killer. This is most apparent in the Lodge Boy and Thrown Away group. A child or dwarf, usually aided by a twin brother, destroys many monsters.

10. The Vengeance Motive. An animal or some natural force, insulted by a human being, seeks vengeance, which it generally obtains.

11. The Sky Lover. A man or woman marries a sky being in human guise, generally only to be deserted.

12. The Impostor. A man overcomes the hero and takes his place and honors.

13. The Impostor Test. The hero and impostor both are set a task by suspicious people. The hero, of course, succeeds. A frequent Menomini test is shooting squirrels with blunt arrows. The real person kills them without making their noses bleed.⁴

The narrator of a tale sometimes uses these as short cuts in the story when they are secondary to the plot. In any case, the composer of a new story has such a list of procedures before him, not only as examples but as ready-made units, which he can insert in his composition when appropriate. Yet, one not only meets with such plot units, but with strange and novel objects. These are used over and over, just as black cats, broomsticks, etc., appear in European folklore. Some of these, as noted by Skinner, are:

⁴ Alanson Skinner and John V. Satterlee, *op. cit.*, 224-225.

1. The Magic Canoe. Among Menomini, Cree, and Ojibway, we find frequent references to this property, generally, but not always, in connection with the Evil Father-in-Law cycle. This is a canoe which goes by itself when its owner raps on its bottom with his paddle, or cries, "Niticmaun, pon!" or "Tcimaun pol!"

2. The Inexhaustible Kettle. This is a vessel of small size, which usually holds only a single bean or grain of corn and a shred of meat; but no matter how often it is emptied, fills itself again until the user is satisfied. It is generally the possession of an old woman. Variants occur, but always with the idea of inexhaustibility.

3. The Automatic Kettle. This concept is not so widely known as the preceding. It consists of a kettle, which, at the command of its owner, fills itself, hangs itself over the fire, and cooks food.

4. The Miraculous Pipe. A pipe, which, when smoked by the hero, gives forth clouds of wild fowl instead of smoke, but when used by an impostor produces only noisome insects.

5. Fire Arrow. Among the Menomini and Cree, an arrow which sets fire to whatever it strikes.

6. The Singing Snowshoes. A man has a pair of snowshoes which, when he is returning from the hunt, precede him, singing like birds, and fly through the smoke hole into his lodge. Peculiar to the Menomini.

7. Bird Earrings. Live birds worn as earrings, which also sing. Oak-gall earrings occur.

8. The Animal Head Ball. A ball, really a lynx head, which, when batted or thrown at any object, bites it, and brings it back.

9. The Mummified Dog. A dried-up dog which is kept in a box by the hero. When the hero is killed, his widow takes out the dog, which comes to life, collects the bones, howls over them, and the hero revives. In one Menomini tale, little beavers are kept in a tiny box. When the box is opened, they come out and assist the owner.⁵

So far as studied in this way, all tribal mythologies present more or less of these peculiarities. However, the types of plot and the mechanical aids used will usually vary from one geographical area to another, and comparative studies of tribal mythologies and their distributions usually deal with these plots and aids.

⁵ Alanson Skinner and John V. Satterlee, *op. cit.*, 225-226.

No one has as yet been able to show that the narratives of primitive peoples differ greatly in basic styles. Rhythmic form, it is claimed, is common to all peoples, and since it is human emotion and causation that usually supply the plot elements and settings, we may expect no important basic differences. It is rather in concrete situations than in form, that the mythology of one people differs from that of another.

STABILITY IN FORM

Of course, none of these tales was written, so they passed from "mouth to mouth." That a good story will readily travel from one tribe to another will be shown when we turn to the question of distribution, so we must allow for occasional, if not frequent, acquisitions to the tribal lore. In some measure this would compensate for loss, since it may frequently happen that a tale is lost through the failure of someone to retain it; in such cases, it would stand some chance of coming back by borrowing from a neighboring tribe. On the other hand, tales that are directly associated with ceremonies, and, especially if they must be recited as a part of the procedure, are assured a long life. And again, many tribes look upon certain myths as sacred, or as accounting for the origin of the people, the high regard for which would lay an obligation upon the tribe to see to it that a number of persons learned and retained these texts. On the other hand, there is no good evidence that many tribes went so far as to maintain a fixed wording for even these sacred tales. Where we find fixed wording, the text is brief, and frequently metrical. Naturally, songs are fixed, but to learn the precise formulation of narratives by rote, belongs to more highly organized tribal life and to peoples upon the threshold of writing. It is, then, the plot in detail that is learned. Many collectors have recorded several versions of one or more tales, thus giving some idea of the range of individual variation, and, in some instances, several standardized versions were found which were known to a number of narrators as such. All this suggests instability in primitive mythology; yet from American data, noting such myths as are found among the successive tribes of

large areas, it appears that detailed plots of myths may be remarkably stable.

Further, from a chronological point of view, we may expect survival material in a tribal mythology, along with much that is relatively recent in origin. It is, however, difficult to be sure of what is ancient and what recent, because only the plot is preserved, rarely do we find mention of objects and environments different from those of the immediate present. It is true that we do sometimes encounter theoretical statements in tales, as, "this was before people knew how to build houses," or, "to make fire," etc., but no one would accept these statements as proof that the narrative arose when such conditions prevailed. A tale is a tale everywhere, but to be understood, must be given a contemporary setting, and the narrator uses such tricks of style and invention as the code of his tribe will tolerate. So stability seems to lie in the plot rather than in the culture setting; the former may be ancient, but the latter reflects contemporary life. It also appears that heroes, or the mythical personalities prominent in the mythologies, tend to be long-lived.

This vitality was suspected by the early mythological school and Tylor was disposed to give heroes and the beliefs associated with them a high survival value. As we have noted, Max Müller and his contemporaries hoped to find all mythical heroes identical, a hope not now entertained. In recent years, however, a new attempt was made by Ehrenreich,⁶ who proposed the theory that the chief heroes in all mythology were personifications of the sun, moon, and stars; it is true that the heavenly bodies do find a place in most mythologies, but the evidence at hand scarcely warrants assuming them to be primary associations. On the other hand, some heroes can be traced over two or more culture areas and through different languages, but this is due to borrowing. Of course, there is no *a priori* reason why the original human group should not have originated a mythology to be handed on from tribe to tribe and if the sun and moon were personified, then because these bodies are visible in every environment, the chances for survival of the original

⁶ Paul Ehrenreich, "Die Mythen und Legenden der Südamerikanischen Urvölker und ihre Beziehung zu denen Nord-amerikas und der alten Welt" (*Zeitschrift für Ethnologie*, vol. 37, Supplement, 1905); "Götter und Heilbringer" (*Zeitschrift für Ethnologie*, vol. 38, 536-610, 1906).

idea are favorable. The only difficulty is that no way appears by which one can check this theory. On the other hand, the carrying power of mythology may be far greater than we realize, especially for such associations as sun and moon heroes. It is conceivable that plots of tales should be readily displaced as time moves on, but that a number of ideas, animistic and otherwise, should survive. Anyway, we see on every hand how mythology reflects animism and magic and serves as one of the common carriers for them. Who can fully estimate the force of our own mythology in perpetuating animistic and magical conceptions, for example, in stories of fairies and witches?

PLACE OF MYTHOLOGY IN TRIBAL LIFE

For the most part myths are told freely, in the presence of women, children, and strangers. The two subjects a field anthropologist uses as a starter with a new tribe are material culture and mythology. It is true, however, that some restrictions have been observed, as in some parts of America, where certain myths cannot be told in summer, others only at night, etc. Also, where women and children are rigidly excluded from ceremonies and wherever there are secret cults, there naturally such parts of the tribal mythology as specifically relate to such procedures are restricted in their circulation, but, in the main, we find that wherever there is a sizable body of mythology, it is looked upon as a source of pleasure and profit. Old people narrate myths to children and to the young, not wholly because they enjoy doing so, or because the listeners are interested, but with the feeling that every tribe member should know them, as a part of his education. In many cases we note that a certain amount of definite instruction is given in mythology. The attitude seems to be that knowledge of the tribal mythology is necessary, and inspection of myth collections reveals that some myths, at least, carry conceptions of the nature of the world, animistic and other beliefs, which myths may in large part serve as sanctions or authority. Here also we find certain elements of the tribal religion.

Examples of these may be observed in any collection of tribal mythology. Thus some Eastern Algonkin myths explain how

the earth is supported on the back of a great turtle, swinging on a great lake, which will be cited in answer to the appropriate question, and held as authoritative because handed down by their ancestors. The story of abandoned children, well known west of the Mississippi River, is obviously an example of cruelty and ends with full retribution. War stories of clever deceptions and escapes may be cited as techniques to be employed when in similar situations.

Yet, while every adult tribe member is expected to know something about mythology, he is not required to be an expert. The narrating of a myth is something of a gift, one must always have fully learned the plots, and so almost everywhere we find a few individuals who are called upon to give the tale. This professionalism is even more marked when the narratives concern tribal history and the more matter-of-fact affairs of life. It is the custom to refer the questions to the tribesmen known to be well prepared and skilful. On the other hand, primitive people rarely give formal recognition to this function by creating an office or station for the narrator, nor is the distinction so marked or clear-cut as the profession of the shaman and the priest.

We come now to a much more difficult question. What does its mythology mean to a community? Any question of meaning may well cause us to pause; such questions are elusive, but we may reassure ourselves by stating the problem thus, How do the tribesmen use their myths? In the first place, a comparison of primitive cultures with those of historic peoples makes clear that mythology holds the same place in the life of a primitive community as literature has in our group life; it is all they have. Not long ago, a man studying certain Negro communities said he knew of one such community in which practically all the adults could read, but their reading matter consisted of Bibles and hymn books, while other books, newspapers, etc., were almost unknown. The community, however, maintained a rich folklore, and so was superior to primitive communities only in that it possessed a small body of standardized printed literature, but resembled them in that this sacred literature and their own mythology, constituted the source from which they drew ready-made formulations of experiences.

What a contrast, for example, in the content of the community mind in such a Negro group and a wide-awake town in Ohio or Iowa? A visitor should, at once, feel the difference. Perhaps, in such illustrations we may catch a glimpse of the part mythology may play in the life of a tribe. It serves as a body of information, as stylistic pattern, as inspiration, as ethical precepts, and finally as art. It furnishes the ever-ready allusions to embellish the oration, as well as to enliven the conversation of the fireside. Mythology in the sense in which we have used the term is the carrier and preserver of the most immaterial part of tribal culture.

Skinner's studies of Menomini mythology, previously cited, offer some comments on this point.

The part that folklore has played in influencing Menomini social life and vice versa, can scarcely be overestimated. Even today folklore forms an important factor in determining many usages. In disputes over etiquette, for example, these tales are resorted to for reference. They keep alive many beliefs, and are a repository of obsolete customs. Quotations are sometimes made from them, and modern happenings are explained by or compared to mythical examples. . . . For example, wolf-legged, meaning wild. A child, abandoned, is cared for by wolves, and his form, beginning with the legs, has begun to change into that of a wolf when he is rescued. This expression is sometimes used today in the sense indicated. . . .

. . . Interesting survivals are references to animals now nearly or wholly extinct within the range of these Indians. The knowledge of the caribou, for instance, an animal which probably was found far from even their ancient territories, may give a clue to the wanderings of war, exploring, or trading parties. Incidentally, there is no reference in these tales to any tribe of Indians now unknown to us, or within historic times resident beyond the possible reach of war parties although the stories of war with the Osage show a long range. . . .

Some of the stories show a curious blending of actual knowledge of the habits of wild animals and superstition and misapprehension as to their natural history. It is difficult to tell where real observation ends and speculation begins.⁷

⁷ Alanson Skinner and John V. Satterlee, *Folklore of the Menomini Indians* (Anthropological Papers, American Museum of Natural History, vol. 13, part 3, New York, 1915), 226-227.

Finally, if we are interested in social values, many of them will be found in the mythology of a tribe. Of course, not the whole of immaterial culture is found here; only an important part of it. We must be prepared to find tribes differing as to what goes into their mythology, or at least in the emphasis they place upon some situations in contrast to others. No one has, as yet, intimately analyzed enough primitive tribal mythologies to say whether they all contain the same elements, but in the main, this seems to be the case; a story is a story, the world over.

Perhaps the mythologies of North American tribes have been studied more intensively than those of any other primitive peoples and if we generalize on their content, it appears, first of all, that mythologies convey information upon certain matters of interest. For example, few mythologies fail to offer an explanation of how the world came to be. Likewise, they account for the creation of human beings. Another puzzling matter is the phenomenon of death and rarely do we find a tribe without a tale explaining how it happens that human beings die. In so far, a tribe's mythology is a formulation of speculations and beliefs concerning the most fundamental questions in human life, upon which religion and personal philosophy are based. The reader of discussions of mythology by American anthropologists will encounter certain technical terms, for example, the culture hero. The culture hero is not necessarily the creator of the world and life, but is usually a human sort of god who established the present order of life. If one inquires as to how it is that women cook the food and dress the skins, the answer will be that So-and-so ordered it that way, and the name of the originator in each case will be that of a mythical character, to whom a series of narratives refer. This hero also transcends the bounds of culture somewhat and is held responsible for a few specific characteristics of animals, as well as occasional topographic features.

Another term frequently used is that of trickster. More often than not, the culture hero appears in this rôle also. As trickster he stoops to vulgarity and deceit, whereas as culture hero, he sets high standards. Consequently, the cycle of tales found in a tribe's mythology recounting the exploits of this

character, both laud and deride him. This dual, contradictory, although human, trait of a tribal hero has puzzled many anthropologists because of its inconsistency. From our point of view, it is inconsistent and indefensible, but it does not necessarily follow that it appears so to the native. Whatever may be his point of view, this hero is superhuman in ability, leading both in nobility and in vice.

In this connection, attention may be called to another characteristic of North American mythologies. When the culture hero and trickster vents his anger upon an object or an animal, the tale is apparently told for its own sake, but often, at the end, the listener is informed that this is why the animal or object is as we now see it. Thus, there is a tale of how the hero was saved by a young birch tree to which he clung in a storm, but when the storm passed, he flew into a rage, and gashed the bark of the tree; so we are told the tree bears the marks of the knife to this day. Such explanations are so characteristic of North American Indian tales and stand so apart from the plot itself, that they are designated as secondary explanations. There is no reason to believe that the tale was composed to explain how the tree came to have the markings, for example, but rather that the explanation was added at some later time. This principle of secondary explanation not only pervades primitive mythology, but ordinary conversation. As we have said before, tales often travel and frequently the secondary explanation differs from tribe to tribe, according to the kind of explanations each tribe expects its mythology to give.

GEOGRAPHICAL DISTRIBUTION

No one has been very successful in classifying tribal mythologies in their entirety, and thus setting up regional and continental types. The natural approach is to consider each specific tale and trace it from tribe to tribe. One difficulty in the pursuit of this method is that resemblances soon fade out, so that one cannot be certain that he is dealing with a form of the original narrative; yet even so, taking a conservative attitude in dealing with these resemblances, it must be admitted that a few tales cover wide areas. The example most frequently

cited is that of the "magic flight," the plot being an account of how, whenever the hero is pursued, he throws behind him a stone to form a mountain, a comb to form a forest, a vessel of some liquid to become a lake, etc. The various versions contain part or all of these devices, though the other parts of the story are sporadic. Yet, the main plot is found widely spread among all peoples, except in Australia and in South America. By some it is assumed to have originated in Europe and spread thence over the Old World and into North America. A few other identical tales are found in Asia and North America. In such cases, when the identity lies in an arbitrary plot, a single origin seems the best explanation.

When, however, we turn to tales with a more restricted distribution, we find a number widely spread in a continent and a still larger number common to a group of tribes occupying a geographical region. As we remarked before, this indicates a tendency for tales to travel and so we may expect many myths to have no close relation to the systematized beliefs of the tribe in which they are found. Such tribal collections as we have cited will often impress one as conglomerates of many disparate elements, which they largely are, as we have indicated. On the other hand, we do encounter hero cycles; that is, a series of tales assigned to a single hero, who is thereby elevated to a place of first importance in the lore of the tribe. As we have said, Grimm and his immediate successors were impressed by the similarity of heroes in Old World mythology, even though of different names. Similarly, in primitive mythologies, we find tribal heroes of different names, but whose myth cycles contain many of the same tales. This has been interpreted as meaning that borrowed tales are frequently assigned to the tribal hero, thus enriching his cycle. Even the tale, Magic Flight, has been found in such associations. And, further, if there has been a great deal of mutual borrowing, the tales attributed to each favorite tribal hero will come to have much in common for a given area. This might cause it to appear that the heroes were once identical, whereas their close resemblance is due to the borrowed tales assigned to them.

MYTHOLOGY UNIVERSAL

We are now ready to ask if there exists a tribe anywhere without a mythology. All tribes have languages sufficiently well developed to narrate happenings. Talk is one of the marked traits of human kind and it is out of talk that mythology takes form. But we are concerned now with a question of fact which can be answered with definiteness; no people have been observed who do not conserve something in the way of myths and tales.

What is observed is that the tribal mythologies in the world range from poor to rich, from simple to elaborate. Peoples who live in isolated positions and where life is hard, necessitating their scattering and gaining their subsistence in small groups, seem to be those with the weakest mythology. In such cases not only do we find the number small, but the tales themselves of the simpler sort. Nevertheless, these are tales in which animals and heroes play their respective rôles, just as they do in the more elaborate mythologies.

THE HISTORICAL METHOD

While it is generally agreed that mythology embodies the thoughts and emotions of peoples, the American school of anthropology values collections of tribal lore chiefly because tribal contacts can be detected by the tales held in common. Thus, comparative studies of tales gathered from the natives of eastern Siberia and the North American Indians show so many correspondences, that a common origin is attributed to these mythologies. Many intensive studies of specific themes have been made, the chief object being to ascertain their complete geographical distribution and thus reveal evidence of tribal contacts and influence.⁸ The ideal in such studies is to gather complete mythologies for all the living tribes in North America and eventually for the whole primitive world. The use of mythological material for assuming historical contacts and relations

⁸ Robert H. Lowie, "The Test-Theme in North American Mythology" (*Journal of American Folk-lore*, vol. 21, 97-148, 1908); T. T. Waterman, "The Explanatory Element in the Folk-tales of the North-American Indians" (*Journal of American Folk-lore*, vol. 27, 1-54, 1914).

of cultures is usually spoken of as the historical method in anthropology. Such studies take no account of social values expressed in tribal mythologies, of the function of mythology in the tribe, etc., nor need they consider literary characteristics. The procedure is to make an objective comparison of incidents and plots.

However, some attention has been given to mythology as a record of tribal culture. In a preceding section we noted the tendency to give the narrative a contemporary setting. For example, the horse and gun came into use among the Indians after 1492, but we find references to the use of these in tales that must have originated long before. It is natural for the narrator to choose his illustrative materials from contemporary life. If this principle operates generally, then a body of mythology should reflect the culture of the tribe at the time when it was recorded. Boas has made a test of the idea in his study of the Tsimshian Indians. He brought together a fairly complete collection of tales, about 104 in all. His conclusion is that:

in the tales of a people those incidents of the everyday life that are of importance to them will appear either incidentally or as the basis of a plot. Most of the reference to the mode of life of the people will be an accurate reflection of their habits. The development of the plot of the story, furthermore, will, on the whole, exhibit clearly what is considered right and what wrong. . . .

Material [a collection of tales from a single tribe] of this tribe does not represent a systematic description of the ethnology of the people, but it has the merit of bringing out those points which are of interest to the people themselves. They present in a way an autobiography of the tribe.⁹

SUMMARY

The serious study of mythology began in Europe contemporary with the development of philology, the concept underlying the study being a belief that the historical relationships and origins of Old World peoples could be discovered in their mythologies. While it was found that the peoples of Europe

⁹ Franz Boas, *Tsimshian Mythology* (Thirty-first Annual Report, Bureau of American Ethnology, Washington, 1916), 393.

did have many mythological elements in common, the method had its limitations and could not be applied equally to all peoples. It was noted that the American school of anthropology uses mythology for a similar purpose, that is, to discover former historical relations between the tribes studied. This school, however, does not base its conclusions upon mythology alone, but upon comparisons of other traits of culture as well. The body of narratives making up a tribal mythology contains accounts of creation, tales about gods and heroes, moral precepts, etc., and bears the same relation to the tribe as literature does to writing nations. While a tribal mythology contains much that is ancient in origin and deals in part with the doings of heroes of long standing, it does incorporate items of contemporary life and borrowed tales. Tribal mythologies show more or less individuality in form and incident, but otherwise they are generally similar. In subject matter, they resemble each other in recounting the exploits of culture heroes and in the predominance of animal stories, the animals, in most cases, being endowed with human traits. The latter suggests that primitive man found the larger animals of dominant interest and perhaps regarded them as the most mysterious objects in the world. Altogether, it appears that mythology gives us many insights into both the psychology and the culture of primitive peoples.

CHAPTER XV

BASIC BELIEFS AND RITUALS

It has been found difficult to distinguish between philosophy, mythology, religion, and ethics when dealing with the beliefs of primitive peoples; thus, it may be wiser to accept the mass of beliefs as found rather than to attempt to differentiate between religion, philosophy, etc. One of the latest general discussions of primitive religion is by Lowie,¹ who is inclined to define religion in terms of feeling only and therefore as realized in unusual and special experiences. Radin, writing of the religion of the American Indians,² considers two important factors in religion, "first, a specific feeling; and, second, certain beliefs, conceptions, customs, and acts associated with this feeling." He goes on to say that among the beliefs so associated, those referring to spirits take a prominent place, but that, on the other hand, it frequently happens that religious feeling is associated with rituals or even with simpler procedures. In any case, as just stated, a tribal religion is to be sought in a complex of beliefs and practices. Data upon the former consist of written statements by European observers, professing to record the substance of formalized beliefs, which are recognized and transmitted or taught in the tribe. Such accounts are prone to be colored by the interest of the investigator and to vary in completeness with the persistence of his inquiries among the tribesmen. Mythology, however, can be employed as a partial check upon basic beliefs; partial, because we must not take for granted that all the important beliefs of a tribe will be found in these narratives. It frequently happens that a group of shamans, priests, etc., will maintain a body of beliefs and practices which does serve to guide the community at large, but which is not embodied in mythology. And, in all cases, the

¹ Robert H. Lowie, *Primitive Religion* (New York, 1924).

² Paul Radin, "Religion of the North American Indians" (*Journal of American Folk-lore*, vol. 27, 335-373, 1914), 335.

field investigator must get his data in the form of instruction, usually imparted by the best minds of the tribe.³

On the other hand, procedures and customs to which the tribal response is, in part, religious can be objectively observed and recorded. In this the field anthropologist is less likely to go astray; it is only when he attempts to interpret the precise kind of feeling or the particular belief associated with these procedures that he should be followed with caution. Usually, the reader can distinguish between description and interpretation in ceremonial procedure, the latter offered either by the native or by the observer himself. The bulk of printed matter on primitive religion consists of these descriptions of ceremonies and of the regalia and sacred objects used therein, in which description is incorporated a large amount of interpretation. A museum exhibit of the religious life of a tribe, museums being what they are, must necessarily be limited to ceremonial regalia and sacred objects. The comparative study of such objects, together with printed descriptions, is fruitful not only in establishing tribal contacts but also as evidence of types in the expression of the religious complex.

Some progress has been made, however, in the study of tribal beliefs. We have reviewed some of the assumed types: animism, animatism, totemism, and magic, and have noted the tendency to resolve all similar specific beliefs into a single fundamental concept; for example, some students of magic regard the whole complex as growing out of a belief in one type of causation, a power that can be invoked. The idea underlying this seems to be that all ceremonial and magical practices are motivated by basic beliefs. The original defense of animism, for example, consisted in showing how eminently reasonable it was to explain all primitive practices as expressions of belief in animism. So it was with totemism, magic, and so on; but we have seen what difficulties beset such attempts and how far one may be led away from an empirical use of the original data. Also, it is still an open question in primitive social psychology whether we are justified in assuming that beliefs of a basic character do motivate ceremonies. It seems to us that such

³ Radin, Paul, *Primitive Man as a Philosopher* (New York and London, 1927).

must be the case, because we recognize a close similarity in numerous practices and because we are accustomed to believe in the unity of the world and life. So it may still be our safest procedure to secure better records of tribal traditional beliefs and to deal with objective procedures as far as possible. No one has ventured to correlate specific beliefs and ceremonial procedures, but it is through this approach that the motivating power of beliefs will be revealed, if such potency exists.

In other words, it appears that the anthropological problem in basic beliefs and philosophies is so dependent upon specific tribal studies, and is still so undeveloped, that little more need be said at this time. The literature offers a number of such tribal and regional discussions, as Kroeber, for the tribes of California, Lowie for the Crow Indians, and Junod for the Etoi of West Africa. From these the reader may judge how far students have been able to go in observing and interpreting religious practices.

One aspect of the place of beliefs and myths in tribal life may be sought in the attitude of their own intellectual minority. So far, we have no good reason to expect much less relative range in ability among primitives than among us, so then, it is fair to ask, what is the attitude of the intellectual few in a tribe toward their mythology? In the first place, all first-hand students of tribal belief have been impressed with the fact that the tribesman expects real and material benefits from his religion and his magic. His food and passions are the large objectives. Yet, it would be incorrect to say that nothing else is sensed or valued. Learning and understanding are valued and the mark set by the few great minds of the tribe is something to be striven for. Yet, when we attempt to evaluate the intellectuals, our data fail us, no one has seriously looked into this matter. Radin⁴ has offered some suggestions, but does not show how such a group functions. We do have data for the rise of cults and "messiahs," as when a new religion or belief is preached, and secures a following. But, even in these cases, we are not clearly informed as to the attitude of these new leaders toward the old. Primitive peoples rarely find difficulty

⁴ *Ibid.*

in believing many things, contradictory or not; they can be pagans and Christians simultaneously.

The little information we have, suggests that even the few progressives in the tribe show a high regard for the current mythology. There is reason to expect, then, that a tribe's mythology is not far behind its intellectual leaders and while its form may show fair stability, and the basic ideas carried by it tend to survive, it will, however, in its secondary aspects depend upon the development of the intellectuals in the group.

CEREMONIALS

The term, ceremony, has come to stand for a group of primitive traits, not easy to define, but easy to recognize when encountered. Ceremonies may vary from complex and long drawn out procedures to those of an hour's duration or less and may involve most of the tribe or range down to what may require but one or two persons. Viewing modern anthropological literature as a whole, we see that something more than half the pages given to specific accounts of tribal cultures deal with ceremonies. First of all, a ceremony may be either religious, magical, or little more than social, and just as we found it unprofitable to decide what were religious beliefs and what not, so we may now put aside the temptation to classify ceremonies as religious, magical, etc., for any one ceremony may well be all of these at once. But to discuss the characteristics of a phenomenon like this, one must first have some familiarity with it in the concrete. Any good monograph will answer; but we may cite a few examples of tribal ceremonial systems.

Choosing a tribe about which much has been written, the Piegan, a division of the Blackfoot Indians, with whose culture the writer is familiar, we may enumerate the observed ceremonies as follows:

1. The annual sun dance, extending over a period of eight days, and participated in by the whole tribe. With this ceremony goes a sacred bundle with an elaborate ritual and many songs. Eight such bundles were observed and their rituals could be performed independently of the sun dance.

2. The beaver ceremonies, performed with a large bundle of

sacred objects, requiring ten or more persons, must be given at the sound of the first thunder in the spring, but may be given at any other time. In 1912 there were two of these bundles in the keeping of as many different persons. The ritual is long and complicated and the songs are estimated at more than three hundred. Only a few men claimed to know the whole ritual, the learning of which was regarded as a feat.

3. Pipe Bundles. These are important objects, containing large decorated pipestems, a number of animal and bird skins, paints, etc. One outfit examined contained forty-seven objects in all. The ritual is long, comprising from forty-nine to fifty-six songs. In all, there were seventeen such bundles in the tribe, for most of which the rituals possessed individualities.

4. The Bear Knife. A small bundle containing a special knife, among other objects, and accompanied by an important ritual. At the time of observation, one bundle existed, but a number of men knew the ritual.

5. The Sacred Lance. The chief object in this bundle is a lance about three feet long. Ritual elaborate.

6. Otter Bundles. The whole skin of an otter and accessory objects, with which goes a ritual containing forty-nine songs. There were two bundles.

7. Buffalo Rock Bundles. These seem to be archaic bundles each with a short ritual containing seven songs. In 1912 every prominent family seemed to have one of these bundles.

8. Painted Tipis. A common type of bundle was associated with styles of painting for tipis, or tents. Twenty of these were observed in the tribe, the tipi decorations and rituals all differing in some details. Their rituals were moderately elaborate, containing songs ranging from four upward.

9. Other Rituals. The following classes of objects each had a ritual with songs: shields, weasel tail suits, hair lock suits, head-dresses, war bridles.

10. Sweathouse Rituals. The use of the steam bath requires a ritual with a number of songs.⁵

11. Finally a series of eleven societies for men, age-societies, are maintained, each with a ritual. To this should be added three cults and two dancing associations.

⁵ Walter McClintock, *Old Indian Trails* (Boston and New York, 1923); George Bird Grinnell, *Blackfoot Lodge Tales* (New York, 1903); Clark Wissler, *Ceremonial Bundles of the Blackfoot Indians* (Anthropological Papers, American Museum of Natural History, vol. 7, part 2, 1912).

In conclusion, we see that for this tribe are listed more than seventy-five ceremonies, for each of which there is a ritual containing songs, prayers, and the orderly handling of regalia and sacred objects. Certain similarities appear in the ceremonies, in that in most cases the important feature is a bundle of objects which is never opened except in the ceremony, which is again largely a matter of opening the bundle and demonstrating the objects within. This is a kind of tribal pattern, which may occur among some of the neighboring tribes, but not necessarily there or elsewhere. The number of adult persons in the active tribal membership at the time this list was compiled was estimated at 1000 of which about 500 were males. But a few of this number knew these rituals and songs well enough to lead in their performance. We thus get an idea of how much ceremonialism such a tribe can carry in its normal life.

We next turn to Australia, selecting the best known tribe, the Arunta. As described by Spencer and Gillen the ceremonies of the Arunta are of two classes, those in which the entire tribe, even children, may take part, and secret ceremonies open only to fully initiated men. The former pass under the name "corroborees," and consist of dancing, singing, pantomime, and tableau effects. The latter comprise initiation ceremonies and those concerned with ancestors and totems. When performed in series these ceremonies extend over four or more months.

The Engwura, for example, is a series of fire ceremonies, supposed to impart wisdom, courage, and orderly conduct. The procedures, as observed in 1896, took up practically all of the time from September to January and

consisted in the performance of a long series of totemic ceremonies. Unfortunately we did not keep a quite complete list of these, but for three months never a day passed without one of them and sometimes there were as many as six during the twenty-four hours. Each was associated with some particular totem and spot. Thus, for example, one ceremony was called Quabara Irriakura of Umbanjun—that is, a ceremony of the Irriakura (an edible bulb) totem of a place called Umbanjun; another was a ceremony of the Udniringita of Unthurqua—that is, a ceremony of the witchetty-grub totem of Emily Gap near Alice Springs. A few also were associated with mischievous spirits, called Oruncha. Each cere-

mony, further, was associated with some old totemic ancestor who was specially connected with the given locality. Every ceremony was also regarded as the property of some individual who had received it by inheritance, usually from his father but sometimes from his father's brother, if the latter had no actual son. The possession of ceremonies such as these is a source of profit as well as pleasure to the older men.⁶

The closing week of this long series of ceremonies presented a number of procedures in which both men and women took part; the women threw firebrands at the men and later the men retaliated; a fire ordeal in which the young men were laid upon green branches covering a bed of embers, and a similar ceremony in the women's camp also took place.

From this statement it appears that more than one hundred rituals and perhaps twice that many were performed at this time; the number of adult men was about one hundred. Like the rituals of the American Indians those of the Australians seem to follow a pattern of their own, though they differ in detail. Thus, in general, several hours are spent in decorating persons expecting to participate and in preparing the altar or the ceremonial place. Songs and fixed procedures accompany these preliminaries. Finally, when all is ready, the dance and pantomime of the ceremony may occupy but a few minutes, mimicking the totem animal, plant or objects associated with the ancestral spirit from whom the ceremony is assumed to have been derived.

Naturally, these are not all the ceremonies known to the Arunta; one series is concerned with avenging the dead, reminding one, in its objective, of an American Indian war dance and ritual. To these should be added such rituals as those for rain-making.

Peoples living in Arctic Asia and America are credited with simple cultures, yet they also maintain ceremonies. For example, there reside near the extreme eastern coast of Siberia a people known as Chukchee. Their ceremonies are spread over the yearly cycle. As listed by Bogoras,⁷ these ceremonies are:

⁶ Baldwin Spencer and F. J. Gillen, *Across Australia* (London, 1912), vol. 2, 263-264.

⁷ Waldemar Bogoras, *The Chukchee-Religion* (Memoirs, American Museum of Natural History, vol. II, part 2, 1907).

1. Sacrifice to the sea, in which an expert hunter, accompanied by a woman, throws his weapons and an offering of food into the sea.

2. An autumn ceremony consisting of dancing and singing, with offerings of food in all directions in space and to all the winds. A feast is then held and the shamans give demonstrations of their powers. The ceremony has several forms.

3. The Keretskuss, a two- to five-day procedure pertaining to a mythical hero. A special costume is worn, special objects are placed in the house, a net, specially painted canoe paddle, and a wooden image of the hero. A small altar for a ceremonial fire is made; the whole is accompanied by singing, dancing, and feasting. At the end, all food remaining is cast into the sea and the wooden image burned.

4. A ceremonial exchange of presents is indulged in upon several occasions.

5. The trading dance, a form of wife exchange, or a kind of marriage.

The Chukchee live in small village groups, membership in which is not very stable. Here we see a less complicated set of ceremonials than in the preceding examples, but still, rituals of one general pattern, the feast and sacrifice to the sea, the usual ending.

THE PROGRAM IN A CEREMONY

Most ceremonies, wherever found, seem to follow one general program. The program, or what is frequently spoken of as the ritual, usually contains the following in varying order:

1. A narrative, or origin myth
2. Offerings and purifications.
3. Songs.
4. Dances and evolutions.
5. Prayers.

Usually antecedent to the demonstration of the ritual, is a period of preparation of the place, the accessories required in the ritual, painting, purifying the participants, etc. These activities may run over several days or even weeks. Finally, when everything is ready, the program, as outlined above, is carried through to the end without undue interruption.

When we turn to the ritual itself, we find it customary to

account for its origin by narrating a myth. This narrative may relate the exploits of a hero and close with the statement that this ceremony came from him, or it may tell how it happened that this ritual came to be known. In opening a ceremony, the leader may recite the appropriate narrative, or he may merely refer to it, on the assumption that everyone present knows it in outline, if not in its entirety.

Offerings are made, often symbolically, in ways not necessarily peculiar to the ceremony itself. For example, in most American Indian rituals the pipe is used to offer a smoke to the beings or ancestors involved in the origin of the ritual. It must be handled in a particular way and offered in a fixed order. Yet, it frequently happens that the pipe is handled identically in every ritual, or that the tribe has a single pattern for this procedure. But certain acts of purification are also required: the participants may be bathed, bled, greased, painted, or adorned with special objects. The ceremonial ground may be sprinkled with something to the same end. In many cases incense is used both for the person and the accessories. These also often have single patterns within the tribe.

We come now to what are usually regarded as the major elements of the ritual, the songs or chants. The words are limited in number, ordinarily a phrase or two, which marks the dominant note in the ceremony. Among many American Indian tribes the spirit of the being from whom the ritual was derived is sung down or up from his abode into the presence of the performers, the phrases in each successive song, marking stages or steps in his progress. Also the dancing and marching may intersperse the songs. Actual mimicry, or acting, is usually present in some form. In Australian ritual, for example, if the spirit of the kangaroo is involved, the participants may hop about like that animal. The African Bushman may prance like an eland, etc. Again, among tribes possessing more complicated cultures, masks and costumes may be worn to represent more completely the being or animal spirit, as the case may be. Drums, rattles, etc., furnish the accompaniment, sometimes themselves representing the voices of the spirits.

Naturally, if these spirits or beings are invoked, something is expected of them, and so appeals or prayers are made to them.

It may well be that some rituals are conceived of as prayers, but usually, specific statements are made asking for power, protection, etc.

This pattern will be more or less elaborated as one passes from tribe to tribe, or from ritual to ritual, within the same tribe. Yet, as far as ceremonies have been observed they all have these elements in some form; hence, we see in the ritual something like a play on a stage, or a dramatized narrative. A ceremony may be more or less entertaining and artistic, but it also has associated with it religious feeling, and the occasion is serious; to some extent the welfare of the whole community is at stake in the procedure. Again, the performance gratifies the vanities of the participants, giving them opportunities to demonstrate their skill. All of these and many other factors are involved in the ceremonial complex, because of which intricacy we cannot say that these are strictly religious procedures.

So, reduced to its basic elements, a ritual may be expected to include the impersonation of a living or mythical being, songs, dances, certain definite equipment, and a proscribed series of manipulations.

THE CEREMONIAL PATTERN

What is called the pattern concept seems to have been developed from the study of tribal ceremonies. When intensively scrutinized, an array of ceremonies from a single tribe appears to be of one pattern, for example, for the Piegan Indians, a ceremonial bundle, a sweatbath ceremony, songs sung in groups of seven, a vegetable incense burned upon a special altar, and rituals comprising origin myths, songs, opening of the bundle, and dancing with the sacred objects in the bundle. This is, of course, the pattern for this particular tribe, but resembles more or less the patterns observed among neighboring tribes. In the case of the Piegan Indians, we have reason to believe that some of these ceremonies were constructed by re-vamping rituals borrowed from others to fit the tribal pattern. In tribal theory, however, each is supposed to have originated in a dream or vision, and, it may well be that the initial idea had such an inception, but it is clear that in elaborating the ceremony, the

originator followed the existing tribal pattern. Like all peoples, this tribe entertained the ideal of success, and one of the most laudable achievements was to become the keeper of a ceremonial bundle. Naturally, this put a premium upon the creation of new bundles, that places might be found for other would-be keepers. It appears then that what one did under these circumstances was to think of another bundle of the same pattern, rather than something different. Indeed, the chances for a variant to survive would be small, since it must not be overlooked that these ceremonies form a system and function as an important part of the tribal life, and that they are of one pattern perhaps because in that way they fit harmoniously into the tribal scheme of life. If, on the other hand, the new ceremony differed wholly in form, it would not fit into this established order and so would not be worth perpetuating. In other words, a foreign ceremony is worth while only after it has been altered according to the tribal pattern.

Turning now to the primitive world at large, we find pattern phenomena to be the rule, in fact, universal. If we turn to Spencer and Gillen, the Arunta ceremonial pattern is not difficult to discern; there also seems to be a more general Central Australian pattern, just as in America there seem to be ceremonial patterns for the respective culture areas. The Siberian studies of Jochelson and Bogoras indicate that the type for the Chukchee suggests the pattern for all of Eastern Siberia. There is reason to expect ceremonial patterns for African tribes, though the data for that continent as a whole have not been summarized.

The facts are, then, that though a tribe usually maintains a surprisingly large list of rituals, for the most part, they follow tribal patterns and so are organized around a few basic ideas. This would seem to facilitate their functioning as factors in the tribal system.

RIGIDITY OF THE RITUAL

We sometimes encounter extreme statements as to the fidelity with which rituals are retained by generation after generation, but these are assumptions rather than statements of fact. There

can be little doubt that the primitive entertains the ideal of accuracy and fixity and that he strives to carry out his rituals in the proscribed way, but here and there we have hints that changes and revisions are frequent, that even innovations are occasional. In the first place, the procedure is not written, nor is it learned by rote. The only part of the ritual that has a definite verbal and rhythmic form is the song, but in most primitive groups we find sanction for all changes, in that a dream or a vision will be sufficient warrant for elimination or substitution. On the other hand, we have reason to suspect that the main features of some ceremonies are very old. Thus, the snake dance of the Hopi Indians of Arizona seems to have been going on for several hundred years, though we cannot be sure that the details of the ceremony are now the same as a century ago. This is also true of the sun dance of the Plains Indians; from historical data we know that a few tribes practised this ceremony a century ago, but we have sufficient knowledge of the distribution of the ceremony to see that during this century of its known existence several tribes have made changes in the procedure. On this account, then, we may doubt that in its present form the sun dance is even a century old.⁸

What we may expect, then, is that rituals and ceremonial procedures vary in stability; that the basic elements in the ceremony, the fundamental idea, will have a reasonably long life, but that the details of the ritual will change at a much more rapid rate. The degree of stability is probably much less than in language, but perhaps about the same as in mythology.

THE OCCASIONS FOR CEREMONIES

Many proposals have been made to explain why people maintain ceremonies, but a good answer is yet to be given. Because it has an audience, the ceremony is said by some to be no more than an entertainment, the occasion for a celebration, a holiday. But this does not fully cover the situation, for the holiday seems to be secondary. We would scarcely agree that the Fourth of July is celebrated so that young people may shoot fire crackers

⁸ Leslie Spier, *The Sun Dance of the Plains Indians; Its Development and Diffusion* (Anthropological Papers, American Museum of Natural History, vol. 16, part 7, 1921).

and that parades may be held; that we have Thanksgiving that we may eat turkey, and so on, because we know these are not the ideas that entered into the inception of these procedures. Nor would it do to say that the Hopi Indians dance with snakes in their mouths to entertain the people, for though that is one result of the procedure, the dance has a more serious aspect.

We may comprehend the situation better if we review the occasions for performing ceremonies. One notes, first, that many of them are given once a year, and so directly or indirectly, are ordered by the movements of the sun, or periodicity in rain, temperature, plant growth, and so on. These phenomena are appealing to men because obviously correlated with the food supply. So we find the spring and the harvest among the favored times for ceremonies. Hunting and fishing peoples choose the seasonal migrations and rutting time for the fauna concerned. For example, the Bushman of South Africa have a ceremony associated with the eland; the many Australian tribes have their rituals for increasing the totemic plants and animals; the snake dance of the Hopi Indians is expected to bring rain and good crops; a number of tribes in the Mississippi Valley give ceremonies at the first thunder in the spring, a sign of renewed life; many agriculturists among the Indians also perform a ritual at harvest time. Many anthropologists claim that these associations have no significance and no part in the origin of the ceremony, but the association cannot be denied and the usual attitude of the tribe is that the performance of these is essential to their welfare.

It is true that some ceremonies are not seasonal, but may be held at any time. These, however, frequently have some relation to health or bodily injury. In many cases, a sick person expects relief when a ceremony is performed and some ceremonies are performed wholly for such purposes. Also, we may include under this head rituals pertaining to safety in war, gambling, etc.

It will be recalled that Frazer regarded magic as fundamental and that out of this came religion, ceremonialism, medicine, etc. When we go deeply into the various primitive ceremonies we have considered, we soon find a type of procedure that agrees with Frazer's conception of magic. In each case

the tribe professes to believe that if the ritual is performed something beneficial will follow, and singing songs to bring the rain, to increase the game, to drive away disease, and so on, fall under the head of magic. Wherever we observe primitive rituals, this idea appears, not merely as our interpretation, but in the expressed attitude of the participants. There seems, then, justification for the statement that one basic idea, but not the only such idea in ceremonies, is the promotion of welfare, health, and long life by magic.

We may quite well grant that all this may be true and still not account for the origin of ceremonies—our search for origins has so far been fruitless—yet, it points to the evidence that ceremonies are given as a means of increasing food and general well being. From this point of view, the function of tribal ceremonies is clearly in part such conservation and protection. That they also have an entertainment value is clear.

PLACE OF SONG IN THE RITUAL

The collection and the study of primitive music is a recent development and is, for the most part, in the hands of American scholars. The person who did the most to dignify this study was Alice C. Fletcher, known for her many contributions to anthropology. The use of the phonograph as a means of recording songs was initiated by J. Walter Fewkes. Today, the recording and comparative study of primitive music is recognized as an important problem. The usual method is to record the singing in a phonograph, securing information as to the song text and its culture associates, then in the laboratory, at home, to make the transcription by ear in our conventional musical notation. A few mechanical devices which are more accurate than transcribing by ear have been perfected for recording the voice directly, or photographically, but in any case, primitive songs lend themselves to research only after they are transcribed.

As previously stated, songs constitute the framework of ritual and, in most ceremonial procedures, are regarded by the natives as the vital part. This ceremonial use of the song and the dance is so universal that we may regard it as fundamental

and as offering a direct approach to both emotional and cultural problems. It has been said that song and dance are the natural expressions of feeling. We may agree that they possess an unusual degree of spontaneity, but, on the other hand, we find both singing and dancing consciously used in ceremonial procedures, the idea being that the greatest magical power resides in the song. This universal resort to song and dance as the highest appeal, as itself containing the elements of supernatural power, is one of the significant facts in social anthropology.

So far, the students of primitive song have been busy gathering data, and this is a task of such magnitude, that the available collections of tribal songs, adequately transcribed, are relatively few.⁹ Nevertheless, it appears that the songs of a tribe will fall into a few stylistic groups, or patterns, and that different tribes and regions will tend toward pattern characteristics. These are patterns of composition, rather too technical for presentation here, but are now in process of development at the hands of specialists. Thus, it seems that songs behave quite like the other traits of culture we have studied, their merit lying in that, being what they are, their form is relatively fixed and so, if correctly recorded, they have a precise objective value, rarely found in ceremonial and social traits. As the matter stands, however, the study of primitive music is still in the pioneer stage and cannot, therefore, take a prominent place in social anthropology.

On the other hand, the songs of even primitive peoples have texts as well as music. Ideas are expressed in the song. One can, therefore, consider the text, or the verse, as the main objective, and since songs play so large a rôle in ceremonials, regard these texts as carrying the basic ideas involved. In such rituals as have been recorded in detail, it does appear that the important ideas are carried in the song. This is shown in the accompanying ritual of the Blackfoot Indians. This was trans-

⁹ The following are some of the best known titles: Alice C. Fletcher, *Indian Story and Song from North America* (Boston, 1900); Frances Densmore, *Chippewa Music* (Bulletins 48 and 53, Bureau of American Ethnology, Washington, 1910 and 1913); *Teton Sioux Music* (Bulletin 61, Bureau of American Ethnology, Washington, 1918); Helen H. Roberts, *Ancient Hawaiian Music* (Bulletin 29, Bernice P. Bishop Museum, 1926); Helen H. Roberts and Diamond Jenness, *Songs of the Copper Eskimo* (Report, Canadian Arctic Expedition, 1913-1918, vol. 14, Ottawa, 1925).

lated from a text dictated by a native. The verses give only the words in the songs, leaving out the meaningless syllables used to fill out the lines.

A RITUALISTIC NARRATIVE

The following narrative accounts for a ritual observed by the Piegan division of the Blackfoot Indians of the western United States and Canada. Certain curiously shaped stones, usually fossils, were kept in bags with paints and other accessories and were exhibited when the ritual was given. The purpose of this ritual was to make the buffalo plentiful, but also to promote the general welfare of the people. In the ceremony exact rules for handling the sacred stones, offering incense, etc., are followed, but, in the main, the ceremony repeats the original incidents given in this narrative which follows:

Now listen. I suppose you are asking about the iniskim [buffalo-rock], about the way we first came to get it. At a place called Elbow-on-the-Other-Side [in Canada] it was found. The woman who found it was very poor. Her name was Weasel-Woman, and her husband's name was Chief-Speaking. Well, now you will hear the true account.

At a curved cut bank called the Place-of-the-Falling-off-without-Excuse it was found. This woman was walking around there among fallen timber [logs]. Her people were all about to die of starvation. She had come out for wood, and was walking around picking up pieces of bark. Then she came to some berry-bushes on all sides of a log and began to pick white berries. Now she heard something singing. The first that she heard was "Ho-o-o-o!" as if some one were making the wing-like movement [a ceremonial procedure]. Near her was a log pointing toward the setting sun. The singing was in the log. An iniskim was sitting in a broken-out place at the end on a bed of shedded buffalo-hair and sage-grass. She could just hear it sing. She stood with her head to one side, listening for a time. Then she began to pick berries again. Now she heard it:

Yonder woman, you must take me.
I am powerful.
Yonder woman, you must take me,

You must hear me.
Where I sit is powerful.

Now that is the way it sang to her. As she was walking towards the place from which the sound came, she saw that the object sitting in the broken place was the one that did it. Then it said, "Ky-ja, this is where it is singing." She did not know what kind of a thing it was. She thought that perhaps it was a mouse or bird. As she slowly removed the shedded hair that covered the place, she saw it. It was a rock, a buffalo-rock. As she was standing over it, it said, "Do not take me yet. Go back and then walk slowly towards me." [It is now teaching her the songs and ceremonial procedure.] While she was approaching, it sang a song for the woman:

A buffalo-rock, I am looking for the place where he is sitting.
Now I have found him. [Takes it up.]
He is powerful.
A buffalo-rock, I have taken him up.
He is powerful.

This is the song when she went forward to take it up. This is the time when it told her that she should sleep out in the brush for four nights. It said, "I will show you everything about it. You, I have taken pity on you. Now you will be out four nights, and in eight nights you will get something to eat, you will sit down with great abundance."

Now when she came home again she stood outside and said to her husband, "Do not be angry. I have received something [medicine-power]. We shall have something to eat. Chief-Speaking, do not think I am double married [committed adultery]. The reason I have been sleeping out is that I have received something. It is not valuable [meaning the reverse], but it is to be the only thing [medicine] you are to live by." Her husband said, "Now where is it?" Then he saw it. "Now," he said, "she slept outside, and this one [the rock] sang for her." Then she came into the lodge. Her husband was a beaver-bundle man, and there was always a crowd of men in the lodge. He said to his head wife, "Give that woman your clothes, she who is very poor."

Now Weasel-Woman expected to receive tallow. They looked about for fat or grease, but every kind that was offered her was refused. At last they offered her some kidney-fat. Then she said, "That will do." She put it down there, then she sang. She was

going to feed them all with it. She told the men to get their rattles ready. Then she sang:

This man says,
Kidney-fat, I want to eat it.

Then she sang about herself:

Woman says,
Kidney-fat to eat, I want to eat it.

In the circle was a young unmarried man who had been chosen to lead the buffalo over [the cliff]. She said to him, "You sit here at the head of the lodge. I shall paint your face first. You are going to eat first, for you are to drive the buffalo." Then he sat by her. Now she was painting his face. She was going to give him something to eat, and, changing the words of the song, teach him the way he should sing it when the buffalo were being driven up; also tell him how he should stand at the edge of the declivity where the buffalo are to fall over. He was to sing four times:

I want to fall [them].
Kidney-fat, I want to eat it.

The reason for all this was that the people might be fed.

"Now," she said to her husband, "you are to handle this iniskim. Men are always better at it than women. Such things are not in keeping with the way we live. It will give you dreams [visions]. We will use it for a long time [live long]." "Yes, you are right," said her husband.

Now she painted the young man's face. Now he was about to hear the song. Her husband was making the medicine-smoke. She took the young man's hand.

Man says, "Woman, iniskim, man.
They are powerful."
Man says, "Those rocks, I move them around.
It is powerful."
Woman says, "Those rocks, I move them around.
It is powerful."

Good running of buffalo.
The driver is coming with them.

We have fallen them.
We are happy.¹⁰

It will be observed that these songs carry the key ideas in the driving of the buffalo and their falling into the trap, and, for those familiar with their import, tell the whole story. This is highly characteristic of primitive songs, the simple phrases being repeated over and over. Further, reference to Miss Fletcher's Hako ceremony¹¹ will show how a song may be composed of many verses, each verse differing from the other in a single important word; thus (p. 43) in a song concerning painting the ceremonial ear of corn, there are six stanzas of seven lines each, the different words in each being, standing, flying (soaring), touching, marking, spreading over, completing. It appears that these words mark the steps in the process of painting the ear of corn. It remains to be seen in how far this type of repetition is characteristic of all primitive songs, but so far as the available examples go, the limitation of song texts to a repetition of a few skeleton phrases seems to be the rule.

As just stated, it is agreed that song is superior to ordinary speech as an inciter of emotion, but there may be other ways in which songs function in the ritual. Thus, among primitives there is no writing, so a ritual must be preserved in memory and the parts of the rituals retained in fixed form are usually songs. In prayers and lectures the leader of the ceremony seems to follow his memory of the ideas to be conveyed and so the words used vary from time to time, but a song has a form as well as a word content. Combining rhythm, tone, and words, results in a unit which can be remembered and passed along with little loss due to error of rendering. In other words, the key ideas and their sequences guide the conductor of a primitive ceremony, and since these seem to constitute the texts of the songs, it is not strange that song is regarded as the vital part of a ritual.

The technique of primitive dancing is usually simple, the number of step patterns within a given tribe being limited to a

¹⁰ Clark Wissler and D. C. Duvall, *Mythology of the Blackfoot Indians* (Anthropological Papers, American Museum of Natural History, vol. 2, part 1, 1908), 85-87.

¹¹ Alice C. Fletcher, *The Hako: A Pawnee Ceremony* (Twenty-second Annual Report, Bureau of American Ethnology, Washington, 1904).

few. Most Australian dances are mimics of animals, and quite realistic; in the war dance of the American Indians it frequently happens that the steps are simple, but the evolutions simulate trailing and charging the enemy. Song usually accompanies the dance, the two are regarded as complementary.

SUMMARY

The philosophical, religious, and magical beliefs of a tribe are, for the most part, expressed in objective ceremonies amenable to description, thus furnishing the data anthropologists consider necessary to deal with this subject. Ceremonies are found to follow programs projected on similar lines. The formalized procedure, or ritual, is found to be essentially an exposition of the assumed initial event and is, therefore, based upon a narrative. The procedure in the ceremony is, in the main, a kind of dramatic presentation of the narrative, though usually less artificial in conception. Song is one striking feature in such ritual. Songs are fixed in text and music and are about the only parts of the ritual having definite verbal form. Also the power or efficacy of the ritual is assumed to lie in the song. A tribe may maintain many ceremonies, each in the keeping of a few individuals, but there is usually a tribal pattern, so that these ceremonies differ in details rather than in total form. This may be one explanation for the large number of rituals a few men in the tribe are able to maintain without written records. There are so many elements in common that the memory is not heavily taxed. It is also probable that the texts of songs are more accurately retained than prose texts.

CHAPTER XVI

TECHNOLOGY

If the reader visits a museum dealing with living races, he finds exhibits of clothing, baskets, weapons, tools, foods, charms, etc., usually grouped according to the tribe from which they were obtained and intended to show its material culture. By comparing the exhibits for one tribe with that of another, individualities may be observed and regional similarities discovered. One advantage in having a museum collection is that the objects speak for themselves; all we need is accurate information as to the tribe producing them and a minimum of knowledge as to how they were used. Even the last can be dispensed with, for important conclusions can be drawn by comparing the objects as they stand. The archæologist, for example, cannot be sure of the uses of stone artifacts, but nevertheless, he determines their types and distributions. However, in securing collections from living peoples, the collector seeks the important data concerning the manufacture and use of the objects, or, to put the matter fairly, his purpose is to learn all he can about each phase of material culture, choosing such objects as will illustrate, or demonstrate, the subject. Thus, if he finds the women making baskets, he learns all he can about this: the types of baskets made and their uses; how the materials are gathered and prepared; the different weaves employed; and the decorations. To illustrate these points, a type series of baskets, materials, unfinished baskets to show the techniques of weaving, and a series of decorated baskets are collected. The museum ideal is to exhibit this material with explanatory labels and the whole is regarded as data on the basketry of the tribe concerned.¹ In a similar manner, the field collector may undertake the study of hunting, fishing, agri-

¹ Otis T. Mason, *Aboriginal American Basketry: Studies in a Textile Art Without Machinery* (United States National Museum Report for 1902, Washington, 1904).

culture, cooking, house building, etc., eventually covering all the tribal activities. The basic feature that makes such a study feasible is that in all such matters the tribe has a prevailing style for each type of object and process, and when once these styles have been determined for a large number of tribes, they can be classified, compared, and utilized like other scientific data. Such subjects as social organization, totemism, and animism are not easily represented in a museum collection, but the presentation of data on magic may be advantageously supplemented by an exhibit of charms and other accessories to magical procedures. But aside from the advantage of having before one authenticated objects for study, museum collections when well made, serve as a partial substitute for a visit to the living tribes. If, for example, one walked through a large museum hall for the tribes of Africa, he might in this way realize something of what would appear if the villages of the tribes themselves were passed in review. Automatically, also, the collections fall into certain classes, as those showing agriculture by the presence of hoes and other implements, those showing milking stools and pails in areas where cattle were raised, etc. All this could be quickly observed as one passed through the exhibit and would serve as a perspective outline to be carried in the mind and into which additional information can be incorporated.

HISTORY OF MUSEUMS

The collecting of curious objects from strange lands is an old, old weakness of mankind, which was greatly stimulated by the discovery of the New World, and so objects made by Indians, Eskimo, Polynesians, etc., found their way into collector's cabinets, and it is in these cabinets that the modern museum had its beginning. We cannot go into the history of the development of museums in general, for we are concerned chiefly with the part museum collections have played in the development of anthropology. For a long time, as we have said, the objects made by living primitive men were regarded as curios embodying no important problem. Eventually, it was shown that they could lend themselves to scientific treatment.

This elevation of curios to the research level and the dignification of technology as a branch of anthropology should be credited to A. H. Pitt-Rivers (1827-1900). He entered upon the collection and the study of the objects made by living man on the theory that their genesis, or development, would be revealed in the objects themselves, just as structure in the bodies of animals and plants is taken as the evidence for their evolution. Before the time of Pitt-Rivers, as we have said, the objects made by savages and other peoples were collected as curios, but no one conceived that in them was to be found an empirical lead to a problem. If, as Pitt-Rivers assumed, the story can be read in the objects themselves, then a new world of inquiry is opened up to us. First, however, the collecting must be accurate as to the location and character of the tribe, and the use to which the objects were put. This done, it was conceived that then one might soon discover how each object came to have its present form.

In his *History of Mankind*, Tylor used the available material in the collections of Pitt-Rivers and others; one of his classical studies was that of fire-making, in which he defended the thesis that man first kindled fire by simple wood friction, passed through several successive steps in elaborating the firedrill, later discovered the use of flint and iron pyrites, and finally ending with the friction match.

A contemporary of Pitt-Rivers was the distinguished American anthropologist, O. T. Mason (1838-1908), who, though influenced by Tylor more than by Pitt-Rivers, showed great originality in the study of technology, placing greater stress upon geographical distribution than did either Tylor or Pitt-Rivers. His methods were of the laboratory type and, in large measure, laid the foundation for the study of material culture, a subject now occupying an important place in anthropology. Mason is best known for his studies of the American Indian collections in the United States National Museum at Washington, especially for his exhaustive work on basketry. He also gave attention to museum methods, using a tribal and geographical arrangement for his museum collections, but in addition sought to discover in these collections the origins of technological processes.

At this point we may note an important matter. Pitt-Rivers, while the leader in this significant development, did not treat his museum collections tribally and geographically but arranged the objects in assumed chronological sequences. This is quite opposed to the usual point of view. We have gone to some length to emphasize that the community or the tribe is the recognized unit in anthropology, and consequently, when one visits a museum presenting collections from living peoples, he finds them arranged by tribes and not according to the form and structure of the objects themselves. Classification by tribes is considered scientific, because one can ordinarily be sure that the objects listed did come from the tribe to which they are attributed; at least such information is usually verifiable. On the other hand, when one arranges the fire-making appliances of the world in a series such as we have noted above, he is resorting to interpretation and drawing a conclusion, which, in the nature of the case, cannot be objectively verified. The tribal arrangement is now regarded as the proper one in a museum, since it records the association of the objects, as observed and observable; the student can then compare them at will, and draw his conclusions accordingly.

For the sake of completeness we should not close this historical sketch without noting the work of the great builder of anthropological museums, F. W. Putnam (1839-1915). He seems to have been a many-sided man, with a genius for leadership and a belief in the study of objects rather than books; he stood for true field-work in anthropology as opposed to mere collecting, insisting that museums should become research institutions and not purchasers of the curios offered them by unscientific collectors. It was under his leadership that the Peabody Museum at Harvard University, the anthropological section of the American Museum of Natural History in New York, the Field Museum of Natural History in Chicago, and the anthropological section of the University of California, were established. In general, the rise of anthropological museums as research institutions, in Europe, as well as in America, may be said to have come strongly to the fore by 1870 and these institutions continue to be productive centers of research.

TECHNOLOGICAL PROCESSES

A number of technological processes have wide distributions and have persisted over great periods of time. Flaking, or chipping stone, is one of these; it is the oldest technique of which we have archaeological record. Naturally, this does not mean that it is the first technological process devised by man, but merely that it is the first handicraft using materials sufficiently resistant to have survived. Whether work in wood or something equally perishable preceded work in stone, we may never know, but it can be demonstrated that, in so far as Palæolithic Europe is concerned, the working of bone came in long after work in stone. Wood is, therefore, about the only known material that might have preceded stone. Further, we find in the stone work of Palæolithic Europe, first, crude, simple forms, and later, much more elaborate implements. In fact, the early forms are so simple that the experts are not agreed as to where the line may be safely drawn between fractures of stone due to natural phenomena and those purposefully executed by man. However, as soon as the working of stone reaches a stage where the primitive technician has in mind a definite form of implement and a fixed procedure in striking off chips, then the close similarity of the artifacts found in a campsite and the wide distribution of the same form, will reveal the character of the technique employed by the makers.

Thus, the distinction between true eoliths and accidental fractures hinges upon the minimum human design, or pattern. Fractured flint, or similar stone, is not proof of human agency, because flints may be broken from pressure in the original bed. On the other hand, if broken by design to serve some purpose, the flints should closely follow a pattern, or type. The earliest forms of flints certainly the work of man are all made after one basic pattern: a pebble is selected and shaped by striking off flakes. The following is a rough outline of the development of their technique:

1. Eoliths—doubtful forms because not distinguishable from pebbles fractured by other than human agencies, miocene, and pliocene finds.

2. Rostro-carinates—a series of large flints from pliocene

beds in England. These are regarded as presenting the minimum of pattern and as an advance over eoliths. These rostro-carinates have a ridge extending their entire length and end in a kind of beak.

3. Coup-de-poing—large pebbles shaped by striking off large flakes from one end; age, pre-Chellean, of the pleistocene. In later divisions of the Chellean the butt of the original surface disappears.

4. Acheulean—the simplest forms follow the above lines but become thinner and the flakes smaller.

The preceding are made by trimming down a pebble, or by shaping what is technically known as the core. Yet, the occasional use of flakes begins to make its appearance in Chellean times and increases gradually to the end of the Acheulean period. The Mousterian horizon, however, comes in with a dominance of the use of flakes, the cores being discarded. The Aurignacian period shows flakes of greater length and delicacy and then comes the Solutrean with its fine “laurel-leaf” blades with surface chipping.

We note that these slow simple developments extend over two geological periods variously estimated as many thousand years. We cannot help being impressed by the importance of the least possible technological step, and how great an achievement even the absolute minimum in pattern may represent.

It is easy for us to sense how a precise way of making a basket may be spread from tribe to tribe, but when we are confronted with a museum collection of artifacts from Chellean stone age horizons, in which occur such simple forms as the *grattoir*, or planing tool, it is difficult to see that here also the worker had a pattern in mind and attained it by a fixed chipping technique; yet, this will be clearly realized after careful study of many such specimens. Further, when we consider the long periods of time in Palæolithic Europe before anything more elaborate appears, and begin to realize that these simple, and, to us, crude forms, represented the maximum achievements in stone, we see the problem of technology in a new light.

We sometimes hear that the art of working stone began to decline in the Bronze Age and disappeared altogether in the

Iron Age, but primitive peoples were making stone points and knives when discovered in the fifteenth and sixteenth centuries and some of them are still doing it. And, of course, broadly viewed, the use of stone in some form, with many special techniques, survives in the most civilized countries. It is true, however, that the introduction of metal soon causes stone tools to disappear.

Students of stone tools have pointed out that they fall into a few classes, according to use, as striking, rubbing, scraping, cutting, sawing, piercing, and boring, and that these functions may be served, as in early Palæolithic times, by two or three simple forms, and that the development of stone tool technique has been in the direction of specialized forms. If, however, we turn to the processes used in making these tools, these are, in the main, flaking, pecking and grinding, and all the many special techniques used by living and extinct races fall, for the most part, under these heads. To come to a better understanding of what is meant, the reader should examine a well-ordered exhibit in a museum, but, if this is not feasible, read some of the special treatises on the subject.²

Ceramics, or pottery, is another important subject. Pottery does not appear in Europe until the Neolithic period and is not found among many primitive peoples. To the archæologist, however, as we have stated, it is as useful in establishing chronological and regional differences as are fossils in the work of the geologist, but the distinctions upon which the archæologist bases his chronology are the secondary details of surface finish and design, rather than gross structure.

In outline, the making of pottery includes the following steps:

1. The mixing of the clays and the introduction of granular tempering material, sand, crushed rock, etc.
2. Shaping the vessel. This may be done by squeezing masses of clay into the required shape; by coiling rolls of clay spirally; or by shaping on a wheel, and by moulding.
3. Smoothing off the surface.

² Otis T. Mason, *The Origins of Invention* (London, 1895); George Grant MacCurdy, *Human Origins. A Manual of Prehistory*, 2 vols. (New York and London, 1924); Henry Fairfield Osborn, *Men of the Old Stone Age, Their Environment, Life and Art* (New York, 1915).

4. Drying.

5. If an ornamented surface is desired, an earthen slip is prepared and spread thinly over the surface; when glaze is desired, the necessary slip is added.

6. If designs are to be in color, these are painted on the surface; if they are incised or stamped into the surface, they are executed after the pot is shaped, but before it dries.

7. Firing.³

Shaping and decorating pottery being a plastic art, it has offered an easy road to expression and to tribal individuality, and so the study of tribal styles and regional patterns in the ceramic art has been carried to great detail.

Another technological process, as old or older than pottery, is weaving. The basic processes are found in such crude, but useful, forms as wattling, but are more clearly seen in basketry. Reference to any treatise on basketry will give illustrations of the important weaves as, plain, checker, twilled, twined, and coiled. Matting tends to follow the methods of basketry. Cloth is usually either plain or twill, differing from basketry only in that the materials are of cord, the production of which calls for a spinning technique.⁴

Another important aspect of technological research is that through it stand revealed the basic factors in industrial processes. The weaving of a carpet on a modern loom impresses one as an intricate procedure and it takes the uninitiated person a long time to comprehend it all, but a study of textile processes as a whole, primitive and civilized, makes it plain that the weaving of such a fabric is resolvable into a few simple processes known to primitive peoples. For example, in the matter of materials, the textile industry makes use of four types of fiber: wool, bast, cotton, and silk. Hair was used by the primitive Australians for twisting into string; many other peoples used the bark of plants for the same purpose. Cotton appears in aboriginal America at an early date. Silk, on the other hand,

³ Otis T. Mason, *The Origins of Invention* (London, 1895); A. C. Parker, *The Indian How Book* (New York, 1927); C. E. Guthe, *Pueblo Pottery Making. A Study of the Village of San Ildefonso* (New Haven, 1925).

⁴ Mary Lois Kissell, *Yarn and Cloth Making. An Economic Study* (New York, 1918).

seems to possess a reasonable antiquity in the old civilizations of eastern Asia. Naturally, the making of string is the foundation of cloth and, for materials, man has been limited to the animal and vegetable fibers that possessed the clinging properties necessary for spinning. Now, so far as the data in anthropology go, every people, however simple their culture, understand the principle of twisting string from animal or vegetable fiber; spinning may be accomplished with the fingers and thumb, unaided, by rolling the fiber on the skin of the leg under the palm of the hand, by twisting with a spindle whorl, by a spring wheel, etc. The more complicated appliances may increase the output, but really do nothing that cannot be turned out by the hands alone. The basic process thus underlies the production of cord from the beginning to the present and the mechanization of the process is seen to have begun in very early times.

When weaving is analyzed it is found to consist of little more than one concept, the most natural form being that of interlacing rods or cords at right angles to each other. This process is also known to most every people, though some may never use it except in interlacing a few sticks; yet, again the process is always the same, the crossing rod or cord alternately passing over and under. Also, so far as the data go, matting and basketry tend to appear before cloth, using these terms in the modern sense; but the distinction here is chiefly in the materials used for weaving: coarse materials resulting in mats and baskets, fine materials in bags and cloth. Like the spinning process, weaving presents several types of mechanization, a simple frame, the addition of a beater to force the weft down on the woof, the heddle to give the pattern, the development of the shuttle, and finally, the use of foot and then of machine power to operate the loom.

In this same way we might analyze pottery, agriculture, stonework, metal work, woodwork, fire-making, etc., finding one or more simple fundamental processes used throughout each cycle, some, which seem to have begun with man and to have been in continuous use to the present; others appear at various periods in human history. It was the discovery of

this characteristic of civilized industry that inspired the leaders of research in technology and which, in large measure, led to the establishing of anthropological museums.

THE EVOLUTION OF TECHNOLOGICAL PROCESSES

Even brief sketches of a few widely distributed industrial processes, such as have been cited, and a cursory glance at a museum collection, suggest that there has been a more or less gradual evolution of these processes. Our experience in life and our traditions commit us to the belief that all our productive techniques have developed by accretions from very simple beginnings. This was fully recognized in the time of Tylor and Pitt-Rivers, but when collections of handwork from primitive peoples became available, this sequence at once assumed a worldwide and all-embracing character. Stone was not only worked by primitive peoples, but archæological researches in Europe made it clear that the earliest steps in the development of this art were simple and crude. As this idea seemed to be in agreement with the experience of civilized man, it was natural to assume that by arranging objects made by primitive and civilized men, according to their apparent logical sequences, the steps in the evolution of these processes would be revealed. In discussing the history of technology, we noted the formulation of this method of interpretation by which it was proposed to recover the whole story of man's culture achievements. Recalling our studies of animism and of social organization, we see that the development of these insights is parallel to that for technology. Further, as the study of technological collections continued, difficulties were encountered, similar to those noted for animism and social organization. It is often possible to arrange the objects in a collection in a sequence, or in steps, presenting what seems to be a plausible order of evolution, but, for one thing, one cannot be sure that he has a complete series of objects; in any case, a check is needed in the form of historical, geographical, or chronological data. Thus, the reason we can speak definitely of successive steps in chipping stone in early Europe is that by the method of stratification we can give the time order in which the various

forms of chipping appear. Nevertheless, the pioneer studies of Pitt-Rivers and Mason led the way to the development of museum collections and the study of material culture, now an important line of anthropological research.

As the matter stands, then, the general problem as to the chronological steps in the history of weaving, pottery, etc., is still an objective and in the minds of many investigators the primary objective. The immediate problems are to analyze the regional data for these technologies, tribe by tribe. A good example of such studies is seen in the researches among the Indians of California conducted by the University of California.⁵

THE PROBLEM OF INVENTION

One of the important questions arising out of technological studies is whether the improvements in technological processes originate after the manner of modern inventions, or whether they are arrived at in a different way. In archæology this question can only be approached by a study of the specimens themselves; among living peoples, it is theoretically possible that the histories of changes in technique can be recovered, but in practice, this is rarely attained. So, for the most part, this history must be read, if read at all, in the specimens themselves. Invention, as we generally conceive it, is a cumulative process, one step succeeding another. For example, we know how the steam engine was developed by many successive improvements and is still being changed. Watt, after all, did little more than start on the right track. So, seeing a series of stone tools from Palæolithic Europe, and noting that the early forms are nothing more than stones of convenient size, the ends of which have been rudely pointed by knocking off chips, and later examples in which slender long chips are struck off and these worked down to symmetrical forms by skilful detailed chipping, we find little difficulty in seeing parallelism. Cave man after cave man, we think, improved the method and discovered better stone; finally, someone proved it better to use the chip than the original core and so on. This seems, on the face of it,

⁵ A. L. Kroeber, *Handbook of the Indians of California* (Bulletin 78, Bureau of American Ethnology, Washington, 1925).

the expected human way in which all that we see came about, and, if we stop there, it may appear that all men, savage or civilized, progress by invention, just as they all breathe, sleep, and eat.

All this is so matter of course that there would be no reason for questioning it were it not for the time element. A change of the simplest kind, extending over a period of seemingly thousands of years, is quite a different matter from the story of the steam engine. When an object like an arrow point reaches a high state of perfection, then one can understand its stability, but why, if invention is the order of the day, should stone technique have lagged so long in the beginning?

Our conception of invention assumes some previous knowledge of techniques and materials and the recognition of a desired objective. We are told that the whole matter may be accidental and unconscious, but it is difficult to account for the survival of a trick, unless the observer had a much desired objective in mind and saw in the new method a suggestion of accelerating its attainment. We are also forced to concede that if invention among cave men proceeded as it does among ourselves, then a great deal of thought must have been given at one time and another to the nature of stone materials, the specific objectives, etc.; otherwise we could not account for what occurred; but we are told that we are assuming too much on the part of primitive man, or becoming too rationalistic. At the same time, it is claimed that the mind of primitive man works just like that of a Darwin or a Newton. What these confusing statements imply is that the last word has not been said respecting the primitive mind; those who insist that in the earliest stone age man had a mind capable of anything man does today, are asking us to believe that he not only came on the scene with an equipment equal to something a million years off, but that this equipment lay relatively idle for a long time. Yet, we are told that even if our Chellean predecessors possessed the minds of Edison and the like, there was no chance for them to function, and so nothing happened. While there is some sense to this argument, it does not satisfy, and so it seems wiser to leave the question open. But to return to the nature of the process itself; we might agree to the probability

that stone tools began with taking a stone in the hand for pounding, scraping, etc. Then may have come the idea of selecting a stone of better shape, the idea of re-shaping, etc., but we are merely reading our own experience and belief into the phenomena, just as is frequently done in explaining the acts of animals. However, to explain a technique or an invention we must assume existing experience and knowledge as the starting point.

The problem then resolves itself into an objective examination of stone-working technique and a comparison of the established sequences with those in the technological processes of modern times, which we know can be safely interpreted in the light of our experience. If the parallel seems close, then we have a strong case. The doubtful point is, as we have stated, that the time element in the cave period seems extraordinarily long, raising the question as to whether the changes in early stone technique came about as mere drifts, or by sudden insights after the mode of the present. No satisfactory answer to these questions can be given now. Penetrating research is necessary along this line.

POTTERY AND AGRICULTURE

We turn now to some of the problems that have arisen in the study of museum collections and technological data. In the New World it was observed that the geographical distributions of agriculture and pottery were fairly coincident; in the Old World, also, the two arts seem to coincide. This raises the question as to the nature of this linkage. First, let us appraise the data. In America we do find some small exceptions, for pottery seems to have been known to a few tribes just beyond the margin of the agricultural area. These exceptions, however, do not negate the overlapping of agriculture and pottery in the great central area of the New World. However, we have an important exception, since the Eskimo west of Hudson Bay, and some of the non-agricultural Siberians, make a little pottery. Turning to archæology, we find the time of appearance for pottery tending to follow closely the appearance of agriculture; yet, there are but three areas in

the world for which we have good working chronological outlines: Southwestern United States, Western Europe, Egypt and Mesopotamia.

In Southwestern United States the earliest well-known culture is that of the Basket Makers who, as the term implies, made baskets, but no pots; yet, they possessed a simple form of agriculture. Following the Basket Makers, however, or in their later career, pottery appears, and from that time on, develops hand in hand with agriculture.⁶ The minute chronologies for other areas in North and South America have not been worked out in sufficient detail to say more than that agriculture and pottery seem to appear synchronously.

Turning to the Old World, we find in Egypt and Mesopotamia again a close association between the two arts.

The problem here is similar to that raised by Hobhouse⁷ and earlier by Tylor. Simply stated, it is whether certain arts and customs occur together more often than separately. So stated, the preliminary inquiry becomes statistical, or a matter of listing tribe after tribe until all the available data have been used. This was the method employed by Hobhouse, but he confined his inquiry to social and economic traits of culture, rather than to technology. Thus, he observed that polygamous marriages were far less frequent among hunters than among pastoral and agricultural tribes; also, that the frequency of wife purchase increased greatly as one passed from hunters to the more intense pastoral and agricultural cultures. These findings tend to support the statement frequently made that the more advanced cultures are responsible for the larger polygamous families and for the extreme commercialism of marriage. Or, to put the matter in another way, the organization and increased efficiency of agriculture went hand in hand with the development of marriage systems. This result does not throw light upon which appeared first, agriculture or polygamy, it merely links them or reveals a tendency to asso-

⁶ A. V. Kidder, *An Introduction to the Study of Southwestern Archaeology, with a Preliminary Account of the Excavations at Pecos* (New Haven, 1924).

⁷ L. T. Hobhouse, G. C. Wheeler, and M. Ginsberg, *The Material Culture and Social Institutions of the Simpler Peoples, An Essay in Correlation* (London, 1915).

ciate. In the case of pottery and agriculture we can approach the question of origin by direct archæological methods and speak definitely of the relative sequence in which agriculture and pottery appear; the only difficulty lies in the incompleteness of data, a defect which future archæological research may be expected to remedy.

However, the fundamental question involved here is whether culture traits are associated in this way because they are related or dependent in function, or whether they just happen to occur together. This is a problem we can best discuss when we come to a consideration of the distribution of cultures and their relations to each other.

INFLUENCE OF MATERIALS UPON FORM

While it is true that the first great impetus to the study of technology came in the attempt to solve one all-embracing problem, or to discuss the principle according to which technology as a whole evolved, there have arisen from time to time a number of special problems. One of these is the influence of the original form of the materials used in determining shape and design. For example, in weaving with coarse materials, as in matting and basketry, the surface takes on a checker appearance due to the crossing of the weaving elements. A splint basket will show this clearly and it is likely that when weaving is regular, all peoples, primitive or otherwise, find the symmetry pleasing. But color may be used to complicate the surface pattern, by using splints of two colors, and in the more complicated schemes, several colors. Yet, the result is a series of angular geometric figures and not curved and realistic designs. In short, the weaving process tends to commit one to geometric design and this is why it is frequently assumed that the one is an outgrowth of the other and that whenever we meet with geometric designs upon pottery it is because basketry preceded pottery. There is some truth in this, but that geometric art never arose in any other way is, in the present state of our knowledge, an unjustifiable assumption.

On the other hand, a good case can be made for convergence in development, since in different parts of the world similar

basketry materials, worked by similar weaves, do result in similar decorative patterns. In this case, it is safe to say that the materials and the processes determined the decorative forms evolved.

Pottery is often considered free from such determining factors because of the plasticity of its materials, and it is difficult to think of anything much more plastic than soft wet clay; yet, time and again, attention has been called to the similarity in form between certain pottery vessels and gourds, shells, and baskets. If, as appears to be the usual sequence, basketry and the use of gourds, etc., precede pottery, then we can safely say that the pottery shapes observed were influenced by the forms of the containers displaced by pots. Further, as intimated above, we do often find painted designs upon pots, closely resembling those upon baskets and other textiles; this, however, might occur at any time, independent of sequence or use of the objects to be decorated, and so is not clearly an evidence of the direct influence of textile art upon that of pottery.⁸

The detailed study of moccasins is another interesting chapter in technology.⁹ The simplest and probably the oldest form is that in which a single piece of skin is shaped over the foot, like a stocking. It is true this piece of skin is first cut according to a pattern, so that when the edges of the piece are sewed up, the resulting moccasin fits the foot. Certain moccasins from the peat bogs of Europe have come to light, dating back to the Bronze Age and beyond; some of these seem to have been formed from pieces of skin from the head of a deer, the shape of which was such as to require little trimming, offering the tantalizing suggestion that the peculiar pattern for the North American soft-soled moccasin was also derived from

⁸ William H. Holmes, *Origin and Development of Form and Ornament in Ceramic Art* (Fourth Annual Report, Bureau of American Ethnology, Washington, 1886).

Max Schmidt, *The Primitive Races of Mankind. A Study in Ethnology* (Boston, 1926).

⁹ O. T. Mason, *Primitive Travel and Transportation* (Report, United States National Museum for 1894, Washington, 1896); Gudmund Hatt, *Moccasins and Their Relation to Arctic Footwear* (Memoirs, American Anthropological Association, vol. 3, 151-250, 1916); Clark Wissler, *Structural Basis to the Decoration of Costumes Among the Plains Indians* (Anthropological Papers, American Museum of Natural History, vol. 17, part 3, 1917).

the natural shape of a head skin. This, however, cannot be proven; but when we turn to the decorations upon Indian moccasins we see every indication that the moccasin pattern employed by the tribe set the styles of decoration. For example, one pattern for a soft-soled moccasin requires a U-shaped insert over the instep and it is the practice of the tribes using this pattern to decorate this insert. Yet, a number of tribes use this same U-shaped decoration upon moccasins of a different pattern requiring no insert; in other words, to keep the same appearance of the moccasin as comes naturally in the old pattern, a fake insert is laid over the surface. If this were the only instance of such similarity it could be treated lightly, but parallel occurrences in other parts of moccasin patterns and decorative fields have been noted; also, we find similar correspondences in decoration and pattern in certain types of skin clothing. We may safely generalize, then, with the statement that the pattern, or the shape of the material in shoe and garment, often exerts a determining influence upon the decoration, occasionally originating specific designs.

To show how the natural shape of skins may determine the style of a garment, one needs but study men's and women's shirts in a museum collection from the Indians of the Plains.¹⁰ The older shirts for men in such collections are made of two mountain sheepskins, or from the skins of a small deer. These are placed back to back, with scarcely any trimming or cutting, thus making a shirt of peculiar pattern. The later shirts are made of large skins, and sometimes from cloth, but the material is now cut to simulate the original pattern. Thus, the peculiar sleeves and side pendants to the garment did not originate in the imagination of the designer, but were determined by the original materials. In these same collections the garments for women are of a different pattern, but were originally fashioned of two complete skins and so their peculiar pattern was also determined by the material itself.

Turning to woven garments we often find the same principle in operation. Ordinary hand-loom weaving gives a fabric that cannot be cut but must be used in "the square," as it were; so

¹⁰ Clark Wissler, *Costumes of the Plains Indians* (Anthropological Papers, American Museum of Natural History, vol. 17, part 2, 1915).

if a shirt is made, its body must be plainly rectangular, and if sleeves are added they must be uniformly rectangular; hence, the simple rigid lines of woven garments among the more primitive tribes are also largely determined by the material itself. Naturally, these limitations can be overcome, but such studies should warn us not to assume that styles and designs are pure fictions of the imagination, until there is good evidence upon which to base a judgment.

SUMMARY

Technology is a general term covering all mechanical processes involving the use of tools and the shaping of materials. Objects illustrating technology make up the collections in an anthropological museum. Material culture is the term frequently used to cover technology and economics among primitive tribes. Many studies are based exclusively upon museum collections. Also the history of museums is in part the history of anthropology. The evolution of technological processes and forms is one of the most interesting human problems in social science, involving the whole process of invention. One of the great leads in anthropological research was the idea that by the objective comparative study of museum collections, an objective procedure, one could arrive at conclusions as to how technological processes and objects evolved. This is a genetic point of view, though the order of progression is quite different from that in biological evolution.

CHAPTER XVII

THE GEOGRAPHICAL POINT OF VIEW

At the outset we sketched the geographical outlook of intellectual Europe before 1500 A.D., and noted how the development of anthropology followed exploration and discovery. Geography is, in some respects, one of our oldest studies, but geography as a science begins with the work of Karl Ritter (1779-1859) in Germany, who not only published a voluminous treatise on the world, but organized the data to illustrate the inter-relation of the earth, in the literal sense, to plants, animals, and man. He, more than any of his predecessors, set up problems, or sought to explain the observed variations in life. Ritter was also an inspiring teacher and initiated what may be called the scientific school of geography, which may be characterized by scientific travel and exploration in all parts of the earth to make observations and to collect new data. Also, the work of Alexander Humboldt set a high ideal in geographical and ethnographical exploration.

However, it remained for Friedrich Ratzel (1844-1904) to found a special science of human geography, or anthropogeography, as he called it. In early life Ratzel traveled and explored, but in 1876 he became a professor in the University at Munich, and later, at Leipzig, and is best known to anthropologists through his great work on the *History of Mankind*.

Modern geography seems to be dominated by the conception that the earth is to be taken as a coordinated whole, in which such phenomena, as temperature, winds, rainfall, etc., occur in sequence, or according to discoverable laws. Ratzel's idea was that man should be considered as a part of this world unit and, therefore, that the different tribes of primitive men, as well as civilized nations, should be viewed in their geographical settings. Such a point of view increasingly emphasizes the environment in which a tribe lives and stresses the ways in which the life of the tribe has been adapted to this environment. The

consensus of opinion seems to be that the work of Ratzel stands as a new approach to the problem of man, the particular insight in this case being, that in environment and migration are to be sought the determining factors in culture.

The primary task of these geographically minded ethnographers was conceived to be the detailed and minute description of all peoples and their environment, which demands exploration, tribal studies, and museum collecting. But behind the work of Ratzel is a distinct point of view; he set his face against the idea that there is an inner functional development of man by which culture can be explained; he believed that the whole of culture is forced upon man from the outside, claiming that in migrations, and in the borrowing of culture, by one tribe from another, can be found the full explanation of any tribal culture. In a sense, this is a theory of culture evolution, because it is assumed that all tribal cultures are related to one another, that everything we observe is an outgrowth of something else. According to this view, anything that is common to a number of tribes came into existence at a given place and time and was carried thence to the places where now found; and any observed universal culture trait started either with the first human group, or was so useful, or attractive, that everybody, savage or civilized, adopted it at sight. It is true that Ratzel himself did not go quite so far, but his followers did, as we shall see later.

So the work of Ratzel and his contemporaries marks the rise of the geographical school in social anthropology, which was chiefly German in origin, and, for the most part, is the present American school of social anthropology, with adherents in England also. Linguistics and archæology have held largely aloof and are, so far, little influenced by this school. Perhaps the chief virtue in the geographical lead is that it emphasizes the importance of mapping all tribes and of recording data upon their modes of life, as well as all local conditions, and so, is objective. This procedure was considered urgent because wherever Europeans settled, native life changed; hence, the necessity of giving all the time possible to observation rather than to the interpretation of data. According to this school, once the data are recorded, there will be time enough to study them.

THE MIGRATION CONCEPT

The animals of the world have regional characteristics; we look for the moose in a part of North America, for the true reindeer in the northern parts of Asia and Europe, for the caribou in northern America, etc., and do not expect to find them in a wild state outside of their ranges. True, we speak of migrating caribou, but these movements are well within their habitat. On the other hand, when we speak of human migration, we usually have in mind the free movement of human beings over the whole earth. It is true that the main types of man seem to have once been localized in regions somewhat as are the animals, for we find one type in Australia, another in Africa, etc., but there are sufficient exceptions to this distribution to suggest, that even in a primitive state, man was exceedingly mobile and adaptable. It is, however, difficult to arrive at a safe view of human migration, except in cases where true historical data are available. The association of race types with such archæological objects as pottery and stone implements is always more or less difficult; for one thing, pottery forms or stone work may easily change during a lifetime, so that many such forms may be associated with the same biological type.

Moreover, it is now well known that traits of culture may travel without the migration of peoples; hence, one cannot safely infer that because a culture is spread over a large area, there has been a corresponding migration. These few cautions suggest that the term, migration, may need definition.

Obviously, a people may move in a number of ways: the tribe as a whole, or a part of the tribe, may move into unoccupied territory, setting up a new community; tribe members as individuals may emigrate to join foreign tribes; or, movement may take the form of slow penetration, or filtering in; the tribe may more or less regularly move back and forth, within wide geographical limits, as in the case of hunting and pastoral peoples. These movements may be slow or rapid. A tribe becoming too large for its mode of life, may segregate into two or more groups, which gradually drift apart, eventually becoming widely separated, even to the extent of occupying quite different

environments. However, these alternatives are presented here as logical possibilities rather than realities, the problem in each case of migration being to determine the manner, the approximate path of movement, and the time.

In the Old World, history concerns itself with the movements of peoples and colonization, but in the literature dealing with the prehistoric and with primitive peoples, the subject is less systematically handled. There is still vagueness as to what happened in the Palæolithic period. Neanderthal man seems to have once occupied western and southern Europe and adjacent parts of Asia and possibly ranged over most of Asia, but it is now impossible to formulate any satisfactory statement as to the manner or the center of this dispersal, etc. It is much the same with respect to Aurignacian man, who followed the Neanderthal race; the appearance of their skeletons upon the next horizon invites us to imagine a conquering, exterminating migration from somewhere. But where, whither, whence, are queries that remain unanswered. Yet, in the next horizon, in Magdalenian time, we find what appears to many as reasonable evidence of a migration from north Africa into Spain and possibly into all parts of southern Europe. The name Capsian is frequently given to these people, and all we know of their appearance is based on the sketches they made upon sheltered rocks and cave walls. It is the presence of these paintings in Spain, approximating the Magdalenian horizon, that suggests an invasion from Africa. As just stated, all this suggests migrations, but until more archæological data are available, little more can be added.

Turning to more recent periods, we note that attempts have been made to trace the movements of tribes in Africa. The Bushman, for example, are supposed to have spread southward into the region where found during the era of European exploration, but possibly the Hottentots followed them immediately, also from the north. Of the Bantu-speaking peoples, it is believed that they spread over central and south Africa, the area of dispersal being the Great Lake region, from which several lines of movement have been assumed. Apparently for a long time central and south Africa have been the scene of militant migrations, the conquerors displacing and obliterating vil-

lages and tribes, so the origin of the native communities now existing in Africa can only be conjectured. In some respects the situation is analogous to that assumed for Europe and western Asia, during the Neolithic and the Bronze ages.¹

Perhaps Oceania is the region in which the most intense interest has been taken, probably because of the long voyages a migrating people must have taken to reach the outlying islands and the skill in navigation necessary to achieve these objectives. Most students assume that all migrations to the islands of the Pacific were from Asia; consequently, it is usually with Asiatic peoples that affiliations of Oceanic cultures are sought. But, we also look to the Pacific for the earlier migrations of man into the New World. The Norsemen may have been the first Europeans to discover America, but, be that as it may, it is certain that man found his way to America from Asia long before. It is sometimes maintained that the Pacific was crossed at a date so early that western Europe was still in the Palæolithic Period. However, the more conservative anthropologists and historians regard Alaska as the prehistoric gateway to America and hold that the movement into the islands of the Pacific Ocean was relatively late and from Asia.

Ratzel and his followers have developed the subject of human geography upon the assumption that the spread of man over the earth has been by expansion in all directions from a Euro-Asiatic center, westward and southward into Europe and Africa, eastward through Alaska into the New World, and southeast into the islands of the Pacific Ocean. Thus, excepting modern times, the Atlantic was the hiatus; Europe and Africa, the western barbarian margin; the Pacific Islands and America, the eastern barbarian margin. The geographical approach to the problem rests upon this conception of the expansion and migration of mankind.

Ratzel was disposed to look upon humanity as a unit. He admonishes the reader many times to regard the realization of unity in mankind as the true objective of research, and states:

¹ A. C. Haddon, *The Wanderings of Peoples* (Cambridge, 1911); Madison Grant, *The Passing of a Great Race, or, The Racial Basis of European History*. Fourth Revised Edition with a Documentary Supplement (New York, 1921); W. Z. Ripley, *The Races of Europe. A Sociological Study* (New York, 1899).

Ethnography must acquaint us not only with what man is, but with the means by which he has become what he is, so far as the process has left any traces of its manifold inner workings. It is only so that we shall get a firm grasp of the unity and completeness of the human race.²

Naturally, Ratzel considers man as a single species and assumes that the differences encountered are largely the result of circumstances, or, that tribes differ from one another because they have moved into new geographical settings. He inveighs against the idea that the spread of Europeans over the world in four centuries following the lead of Columbus, is a new thing, but holds that this, though perhaps more rapid and worldwide than any other single expansion, is only a sample of what has been going on for ages.

The world that we pretentiously style "the New" must have been discovered from the westward many a time before the Pale Faces came from the east as the latest and definitive discoverers. If the Malays have spread over the 200° of longitude that separate Madagascar from Easter Island in a period which, as language and else shows, has not been going on for many centuries; if, since the European discovery of America, individual tribes in that continent have changed their locality by over 2000 miles; if over half Africa, within a belt 40° of latitude in width, a language [Bantu] is spoken with only differences of dialect equivalent to that between high and low German, we must grant that European civilization was not the first to set a girdle round the earth. The great and only distinction is that to-day that takes place deliberately which in former ages was the result of a dim impulse, such as in historic times acted on Alexander and Columbus, in prehistoric times on thousands of their predecessors.

If we regard mankind as a body ever in movement, we cannot, as once was usual, look upon it as a union of species, sub-species, groups, races, tribes, rigidly separate from each other. As soon as ever a portion of mankind had learnt to plough the dissociating ocean, the mark was set for ever-progressing fusion. If we assume, with the majority of anthropologists at the present day, a single origin for man, the reunion, into one real whole, of the parts which have diverged after the fashion of "sports," must be re-

² Friedrich Ratzel, *The History of Mankind*. Translated from the Second German Edition by A. J. Butler, 3 vols. (London, 1896), vol. 1, 3.

garded as the unconscious ultimate aim of these movements of mankind.³

These excerpts from Ratzel give at least a rough idea of the point of view developed by the geographical school. The great leaders in anthropology did not consider the possibility of a direct approach to the human problem through the movements of peoples and the sequence of their expansions over large and small areas. Ratzel, on the other hand, took this as the key to the order of cultures and tribes. Though he does not so state explicitly, he seems to assume this moving about and the inevitable readjustments that follow to be the principle of human life. Therefore, the task in anthropology, as he saw it, is to locate and describe peoples in the faith that with such data we can, if required, reconstruct the great world movements which are unrecorded in history, the movements which, to this way of thinking, brought about the situations with which history deals.

The effect of this emphasis on the instability of man and at the same time the assumption that his movements proceeded in relatively fixed order and direction, has been to place migration over and above every other social factor. One must not underestimate the importance of the geographical contribution, nor forget that migrations occur, but it is well to be conservative in regarding this factor as the key to social phenomena. No one, in this day and time, would regard similarities in social practice as sufficient proof that a migration had taken place, or, for example, seek to explain the wide use of maize in the central half of the New World as due solely to the movements of peoples. Nevertheless, it is still true that one of the important problems in anthropology is where, when, and whence given tribes have migrated. Students of history and contemporary culture have just begun to realize that an analysis of colonization is needed for an understanding of any modern national group. Nor is it likely that colonization will be found strictly modern, for the movement of even a primitive group into a virgin area may have set in motion social processes, the outcome of which was a new culture. Migration is, then, an important concept, probably of primary significance in the study

³ Friedrich Ratzel, *op. cit.*, 10.

of history. In social anthropology, however, the concept may be taken as secondary to the main objective, an understanding of functioning community life.

THE DISTRIBUTION CONCEPT

As early as the seventeenth century attempts were made to group the peoples of the world according to their anatomical appearance, and to take some note of the geographical distribution of the types, or races, so established. Geographical distribution was, however, regarded as incidental, classification was the real objective; but after the rise of the great geographers, and the consequent general appreciation of geographical facts on the part of anthropologists, we find atlases and distribution maps, like Gerland's *Atlas der Volkerkunde* (1892), showing the world distribution for such anatomical features as form and color of hair, eye, skin, etc. Looking at such a map of the world, one is apt to see new relations and to formulate new problems. However, such distribution studies were not confined to anatomical traits, but were also extended to social traits, so that we begin to meet with maps showing the distribution of agriculture, domestication of animals, etc. Perhaps the first most significant use of the mapping method was the preparation of the linguistic map for American Indian languages, referred to previously. This map was not merely a convenient way of locating the tribes and preserving a check list of linguistic classifications, but the geographical relations of tribes speaking similar languages presented problems of origin and migration and also of environmental relations. In other words, to know the geographical distribution of any human trait is to be in possession of data of wide significance.

Nevertheless, the use of distributional data as a primary lead to problems in social anthropology was of slow growth. We have seen that in the study of social organization, technology, etc., little attention was paid to geographical distribution. The notion was that the place of occurrence of any social practice had little weight, because the sequence of such practices was regarded as the chief problem, the assumption having been that wherever found, they would be accidental survivals of the level

of social evolution in which they first appeared. Another impediment lay in that before the geographical distribution of a social practice could be plotted, the necessary information must be available. The world is large, and one must have data for thousands of communities ere a complete world map can be plotted.

DISTRIBUTION DATA

A considerable body of distribution data has been accumulated, though no one has attempted to summarize it, or even treat it synthetically. We have, from time to time throughout these pages, raised the question as to what was universal in social anthropology, or what specific traits of culture should be found in every community. The literature indicates general agreement on the following as being at least so nearly universal that their exceptional absence in a tribe here and there need not be considered.

SOME APPROXIMATELY UNIVERSAL TRAITS

Fire: not only is its use known, but also some method of kindling fire.

Cooking: so far no tribe has been found making no use of fire in the preparation of food, though in some cases the cooking may be near the zero point.

Spears: something under this head is found everywhere.

Knives: the principle of cutting is universally known; stone, bone, wood, and metal, are the usual materials.

Twisting string: the material may be vegetable or animal in many forms, but the basic process is known.

Marriage: the relatively permanent union of a woman to a man, formally recognized by the tribe, appears to be universal.

Magic: the essentials of this procedure are found in every living tribe for which we have adequate data.

This list is not exhaustive, but contains those traits about which there seems to be the least debate. It is probable that formal dancing, song, myth, ceremonial ritual, etc., are also universal social practices, but it is not always easy to distinguish between basic human behavior traits and specific social

practices, or to put our categories of universal social procedures upon levels of equality. Here is where there is need for penetrating analysis of the situation, both behavioristic and anthropological, a goal still to be attained.

The foregoing universal distributions are usually taken as a matter of course; no one sees a problem in them. They are accepted by many as the necessary prerequisites to social existence. Consequently the positive data on distribution are to be found under the headings of practices having restricted distributions. To summarize these data fairly, would call for a list comprising a few hundred traits; the distributions for which will vary from those almost and possibly universal, to those common to but a few tribes; but for the present, we may give attention to those of relatively wide distribution.

SOME TRAITS OF WIDE DISTRIBUTION

Bow: the bow was not used in all parts of the primitive world, but almost all.

Dog: the domestication of the dog was about as widely distributed as the use of the bow.

Nets: the making and use of nets for fishing and capturing game is a widespread practice.

Basketry: containers of the basketry type were widely used, even by the Tasmanians.

Pottery: although many large outlying areas in the world are innocent of pottery, the art has a wide distribution.

Bull-roarer: this simple instrument is found in almost every part of the world, but not in every tribe. It frequently has ceremonial uses.

Story of the "magic flight," or "obstacle pursuit," is found on every continent, except Australia and South America.

Animism: Tylor regarded the belief in souls as universal. Some have challenged this, but all admit it is almost universal in distribution.

Naturally, the reader can extend this list and it is recommended that he do so as one means of acquainting himself with the data; further, the American school of anthropology has

given minute attention to the distribution of traits in the New World. Among the earlier anthropologists, the work of O. T. Mason is conspicuous. Mason did not prepare distribution maps, but in his great work on basketry,⁴ the basket-making tribes of North America are listed, so that if a distribution map is desired, such could be readily constructed. It is true, as previously stated, that Mason did not regard distribution data as of more than incidental significance; nevertheless, he did record the facts. Another work of major importance is that of Culin⁵ dealing with the games of the American Indians, containing tables showing the tribal distributions of the types enumerated, though in this case, also, the data on distribution were not used in the investigation. Of more recent studies, the work of Hatt,⁶ on the skin clothing and footwear of North America and Asia should be noted, the method being first to analyze and compare the tribal styles, and then to note their distribution. Again, no maps accompany the text, but the facts are stated in detail. Lastly, the publications of Nordenskiöld on the tribal cultures of South America⁷ contain maps for each culture trait studied. Comparing these distribution maps with one another, this author arrives at conclusions respecting the place and relative time of origin of certain culture elements.

Naturally, all regional studies in North America deal with distribution. Practically every tribal study is accompanied by a comparative statement in which are enumerated the similar traits present in the cultures of neighboring tribes. This shows how the concept of distribution dominates contemporary research in social anthropology; the first question usually asked about a new trait is, "Where else is it found?" Of regional studies, that of the California Area is probably the most com-

⁴ O. T. Mason, *Aboriginal American Basketry: Studies in a Textile Art Without Machinery* (United States National Museum Report for 1902, Washington, 1904).

⁵ Stewart Culin, *Games of the North American Indians* (Twenty-fourth Annual Report, Bureau of American Ethnology, Washington, 1907).

⁶ Gudmund Hatt, *Arktiske Skinddragter i Eurasien og Amerika. En Ethnografisk Studie* (København, 1914); *Moccasins and Their Relation to Arctic Footwear* (Memoirs, American Anthropological Association, vol. 3, 151-250, 1916).

⁷ Erland Nordenskiöld, *Eine Geographische und Ethnographische Analyse der Materiellen Kultur Zweier Indianerstämme in El Gran Chaco* (Sudamerika) (Vergleichende Ethnographische Forschungen, Göteborg, 1918).

plete; next in order is the Plains Area. In both of these many specific traits of culture have been considered from the standpoint of distribution.⁸

It should be noted that the geographical point of view, especially the distribution concept, is of universal application. As we have stated many times, anthropology tends to restrict its problems to uncivilized peoples; totemism, for example, is a characteristic of primitive tribes. On the other hand, geographical distribution applies equally well to all forms of life. Ratzel and the other great geographers made no distinction between civilized and uncivilized. Consequently the reader need not consider primitive data in his study of distribution. He may, for example, plot the distribution of railroads in the United States in 1850 and again in 1900; and the issuing of daily newspapers at the same periods. The maps prepared by government bureaus to show the relative number of bushels of grain produced in the different counties in the United States, though usually regarded as economic in import, are nevertheless statements of distributions related to cultural processes. Other maps present the locations of libraries, churches, art museums, etc. The social anthropologist, however, is chiefly interested in comparing the distributions for variants of a type, rather than in comparing the types themselves. Thus, rural sociologists may note farm buildings: which fall into types, which can be classified. For example, in parts of Pennsylvania are found barns with basements set into the sides of hills, so that from the lower side one can enter the basement on the ground level, and, from the upper side, the threshing floor of the barn. This type has spread into certain neighboring states, so its distribution might be plotted. This peculiar barn is just as much a trait of culture as the tipi of certain Indian tribes, and can be studied in the same way.

⁸ A. L. Kroeber, *Handbook of the Indians of California* (Bulletin 78, Bureau of American Ethnology, Washington, 1925); Robert H. Lowie, *Plains Indian Age-Societies; Historical and Comparative Summary* (Anthropological Papers, American Museum of Natural History, vol. II, part 13, 1916); Leslie Spier, *The Sun Dance of the Plains Indians: Its Development and Diffusion* (Anthropological Papers, American Museum of Natural History, vol. 16, part 7, 1921).

THE TRIBAL TYPE

So far, the geographical distribution of single traits has been considered. Most of the studies cited have dealt with specific things like the bow, beliefs in souls, etc., and at the outset, that was the procedure in human geography, but later on, the dominant idea was that the life of the tribe was a unit, or that everything the tribe did was more or less functionally linked with all the other traits in the tribal culture. This was, in a sense, a reaction against technological studies and in such wide surveys as those of totemism and animism, the tendency was to ignore the tribal unit, or to consider that the distribution area for a trait of culture rested upon a uniform population base. The objection to this procedure usually takes the form of asserting that the same trait may well play different rôles among diverse tribal groups. Thus, it may be contended that in the case of the cultivation of maize, a tribe of New England Indians, maintaining a few patches of maize, should not be placed upon the same level as an Indian village in New Mexico, producing enough maize to make that cereal its chief subsistence. In New England, agriculture would thus be a mere incident in the economic cycle, the main dependence being upon hunting, whereas in New Mexico, hunting would be incidental. It is not difficult to see the validity of the objection that one should not consider the mere presence of maize as the only data needed in the study of distribution. When less material traits of culture are considered, there is even greater need for additional data. In the study of art motives, for example, a specific design or symbol may have a different meaning as we pass from tribe to tribe. And over and above this is the belief, strongly defended by many contemporary social anthropologists, that no trait should be considered independently, but that the objective should always be the unity of the tribal culture. However, no one seems to have stated clearly what is meant by this, other than that tribal rather than topical field studies should be made. Obviously, there are limits to what a single investigator can do; even in a single tribe he can scarcely cover adequately and with equal efficiency every phase of culture. Nevertheless, this can be

approximated, and it is now the procedure, or has been in the immediate past.

Taking the tribe as the unit is a matter we have discussed under another head and so it need not occupy us further, except to note that even though the geographical point of view is adhered to, the method will differ widely according to whether each important trait of culture is considered separately or whether the tribal culture is dealt with as a whole. The American school seems to have committed itself to the idea that a tribal culture is a functioning unit and so, confronted by a series of tribal cultures, anthropologists have attempted to classify them or to group them according to similarities. In other words, tribal cultures having a large number of important traits in common are considered as a group, or as more or less conforming to a type. Having once agreed upon a classification, one can then work out the geographical distribution for the type. In this way one should arrive at a distribution by tribes instead of by single traits. This method of grouping tribes is well illustrated in Kroeber's treatises on the tribes of California and in the author's survey of American Indian cultures. Once the tribes occupying a continental area have been classified according to the similarities of their cultures, the distributions for these classes can be plotted on a map. These similarities among tribal cultures are often spoken of as affinities.

CULTURE AFFINITIES

It may be easier to comprehend the modern school of social anthropology by noting what is meant by tribal affinities. In these days, if one studies a primitive tribe, he may find a new series of customs and thus be able to record new facts. He will, in this way, be adding to the store of knowledge concerning primitive cultures. It is possible that the field-worker may stop here, without turning to the neighboring tribes, but if he should observe one of these nearby tribes, he will almost invariably find similar customs. For example, when the first observers of primitive life visited Vancouver Island, they were struck by the peculiar wooden houses in front of which stood massive wooden totem poles; on visiting tribes on the mainland

and along the coast to the north, similar houses and poles were observed. Further parallels, now in costume, now in canoes, now in food, etc., were encountered among a number of different tribes speaking diverse languages. At once it was conceived that here were cultural affinities, that in many outstanding characteristics these tribes were similar and thus fell automatically into a single class. Such groupings soon became fixed in speech and literature; even now, when one hears the word, totem pole, he immediately associates with it the Indians of the North Pacific Coast of America. But to return to the point of view of the initial investigator: having observed the totem pole among several other tribes, he is at once interested to know how far afield this custom extends, the presence of totem poles indicating to his mind an affinity of cultures, or that all the tribes having such totem poles have been subjected to the same influences. It is the discovery of such affinities, or the presence of a custom where it had not been previously reported, that is now regarded as an achievement in social anthropology. When, however, such parallels in customs are discovered, they are regarded as due to the mutual influences of one tribe upon the other, which is to say, they borrow from one another. Thus, this interpretation, which seems to be the prevailing view at the present day, is placed upon such similarities by the geographical school.

However, as we have recounted in the preceding pages, this is not the only interpretation proposed. A serviceable illustration of how anthropological investigations may proceed from two or more basic assumptions may be found in the history of the social organization problem. We have followed Lewis H. Morgan in his pioneer development of this subject and noted how he first observed the relationship system of the Iroquois and considered it curious and unique. Later, he was thrilled to find a similar system among the Indians of Michigan. The affinity he saw in these tribal systems was, that they were identical, because the system they possessed in common was one of the forms society passed through in the development of human society as a whole. The research drive was then to discover new social systems and to classify all existing tribes as belonging to one or the other system, and this was just as intense as

any other research urge. On the other hand, investigators of the present generation, as in the case of totem poles, on observing the same system among neighboring tribes, have automatically interpreted them as examples of mutual influence, confined to definite geographical regions. The difference between these two points of view lies not in the external facts, nor in the observations—Morgan's observations have been recognized as precise—but in the basic assumption that lies back of the interpretation. We have seen how these basic assumptions changed as anthropology developed and there is little reason to suppose that the present conception of culture affinity will be everlasting. The results of observations sufficiently objective to be verified, however, do survive over and above these basic assumptions. Among these are observations of similarity, whether spoken of as affinities or otherwise, and it is the habitat of the tribes showing these affinities, defined in geographical terms, that gives the geographical aspect to the modern anthropological interpretation of society as regional rather than temporal in its development.

Further, the usual experience is that when two or more tribes are found to be similar in one important custom, they will also possess others in common. This may be set down, at once, as an important principle and one which lends diagnostic value to a few observations. Thus, reverting again to the tribes of the Pacific Coast of Canada and Alaska, and having observed the striking similarities of the houses and totem poles of these tribes, it is a reasonable expectation that the same tribes will possess a large number of other close parallels in culture traits, which can now be demonstrated from the descriptive literature available. This is again a matter of observation as to the way in which tribal affinities are distributed and not necessarily influenced by the interpretation placed upon it, for when the followers of the modern school declare this to be a case of borrowing culture traits, they are making a statement which may or may not be susceptible of proof, according to the data available.

REGIONAL CULTURES

The term culture area has come into general use and stands for a conception as to the nature of culture, but before enter-

ing upon a review of the various interpretations that have been placed upon the culture area, some note should be taken of the recognized grouping of primitive cultures. In the main, the culture area concept is an outgrowth of recent research in America and so may be considered a product of the American school. A general course of lectures upon the American Indians is almost certain to treat the tribes in groups, and though this grouping will differ slightly according to the individuality of the lecturer, the segregation of tribes may be expected to follow, in the main, the accompanying schedule. To be rigidly systematic such a scheme should embrace every tribe of Indians living in the sixteenth century, but since, as experience with tribal cultures shows, they are so variable in content as to render it difficult to place all of them consistently in such a scheme, we shall enumerate under each regional head only the tribes clearly belonging there, omitting the minority of irregular cultures. In the first place such a grouping is convenient and practical and is justifiable, even if not absolutely inclusive.

NORTH AMERICAN CULTURE GROUPS

1. The Arctic Area. This includes the entire coastal belt from the Aleutian Islands on the west to the Gulf of St. Lawrence on the east; in addition, Greenland and the islands lying westward and north of North America. Not every local geographical unit in this great stretch of Arctic land is occupied by Eskimo, but since no other native peoples dwell therein, the whole may be regarded as the region of Eskimo culture. With this, as in other areas now under consideration, the reader may profit by constant reference to suitable maps and to the literature of the subject; also by marking off upon an outline map the culture regions as here defined.

Most American readers know something of Eskimo culture, as, the use of closely fitting fur clothing, the dog sled, the curious boat called a kayak, the snowhouse, etc. One of their most characteristic implements is the harpoon; another outstanding feature is the large use of the seal for food and fuel in winter, and the consumption of caribou meat in the summer. The social organization of the Eskimo is simple, the camps are always small, probably a necessary adaptation to the food sup-

ply. The position of the shaman is prominent; he uses a tambourine-like drum, and great store is put upon trance phenomena as a means of predicting and controlling the future.

2. Northeastern United States and the adjacent parts of Canada. This would include roughly, all the states north of Virginia and Tennessee, and east of the Mississippi River; also, all of eastern Canada except the Arctic border which is occupied by the Eskimo. One peculiarity of this culture region is that most of the Indian tribes spoke Algonkian languages, the only important exception being the Iroquoian tribes of New York State and the shore lands of Lake Erie. Many tribes in this region were crushed by the colonists before adequate studies of their cultures were made, but such surviving tribes as the Iroquois of New York, the Ojibway of Michigan and Minnesota, and Menomini of Wisconsin, are taken as characteristic.

During the period of European colonization this region was dominated by the Iroquois, a group of closely federated warlike and aggressive tribes. Morgan, as we have noted, began his life work in an intensive study of Iroquois culture. To the west of the Iroquois, around the Great Lakes and north of the Ohio River were a number of tribes, frequently spoken of as the Central Algonkin. At one time some of these were strong enough to defy the military strength of the United States government, but they were finally crushed by General Anthony Wayne. It is logical, therefore, to consider the culture of this region under such subdivisions, as New England and eastern Canada, the Iroquois, and the Algonkin of the old Northwest Territory.

The latter have preserved their tribal organizations more successfully than the others and to that extent stand as the type for the area as a whole. The most important tribes in the group are the Ojibway, ranging through Michigan and around Lake Superior, the Miami in Indiana and Ohio, the Illinois in that State, the Menomini, Potawatomi, and Sauk and Fox of Wisconsin. The material life of these tribes is distinguished by the use of the birchbark canoe wherever practicable, the cultivation of maize wherever climatic conditions permitted, hunting and fishing, the use of bark-covered cabins, simple black pottery,

and an elaborate secret organization, or "lodge," known as the *midéwin*.⁹

Turning to the eastern group, we note that most of the New England and Pennsylvanian tribes became extinct during the colonial period or were forced westward into the Ohio Valley, but in eastern Canada and in Maine live the Penobscot, Micmac, Abnaki, and Montagnais tribes, all of whom have been carefully studied by Speck.¹⁰ These were a snowshoe and bark canoe using people, living largely in birchbark conical dwellings. Wherever the climate was favorable, maize was cultivated, but they were essentially a hunting and fishing people. The original New England and Pennsylvanian tribes were more like the main body farther west.

Finally, the Iroquois tribes of New York State and Lake Erie, speaking a language different from the others so far enumerated, lived in long rectangular bark houses, were semi-agricultural, made black pottery, produced maple sugar, were war-like, and politically organized under the League of the Iroquois. The region as a whole was a country of forests, rivers, and lakes, and many culture affinities are noted for the tribes from Nova Scotia to Wisconsin.

3. Southeastern United States. In this area are included Arkansas, Tennessee, Virginia, and all the states to the south, including parts of Oklahoma and Texas. A number of linguistic families are found in this region, as may be observed in consulting a linguistic map; the important tribes are the Cherokee, Yuchi, Creek, Natchez, and Quapaw.

4. Northwest and Central Canada. Included under this head are the territories between Hudson Bay on the east and the Rocky Mountains on the west, or in terms of drainage, the basins of the Yukon and Mackenzie rivers, excluding the coast lands near their mouths, where the Eskimo are to be found.

⁹ W. J. Hoffman, *The Midewiwin, or Grand Medicine Society of the Ojibway* (Seventh Annual Report, Bureau of American Ethnology, Washington, 1891).

Alanson Skinner, *Medicine Ceremony of the Menomini, Iowa, and Wahpeton Dakota, with Notes on the Ceremony Among the Ponca, Bungi Ojibwa, and Potawatomi Indians* (Indian Notes and Monographs, Museum of the American Indian, Heye Foundation, vol. 4, 1920).

¹⁰ Frank G. Speck, "Culture Problems in Northeastern North America" (*Proceedings of the American Philosophical Society*, vol. 65, 272-311, Philadelphia, 1926).

The Indian tribes occupying these river basins speak languages of a single family—Athapaskan. However, on the southeast, in the Hudson Bay drainage, are a few Cree Indians, of Algonkian stock; the culture affinities of these tribes are, however, with the main body of Algonkian-speaking tribes in the region. The principal tribes are the Chipewyan, Slavey, Yellow Knives, Beaver, Dog Rib, and Kutchin.

5. The coast of southern Alaska and British Columbia, including Vancouver Island, and the western half of Washington and Oregon. A number of linguistic stocks occur here and the important tribes are Tlingit, Haida, Tsimshian, Bella Coola, Kwakiutl, Nootka, and Chinook.

6. California and western Nevada. This region is celebrated for its unusual number of linguistic families, there being twenty-one stocks within its boundaries. The best known tribes are, Yurok, Hupa, Maidu, Pomo, Miwok, Mono, Diegueno, and Mohave.

7. The high semi-arid plateau and mountain country from Salt Lake, Utah, northward, well into British Columbia. This includes those parts of Washington, Oregon, Idaho, and Montana lying in and between the Rocky Mountains and the Cascade Range, with adjacent parts of British Columbia on the north and Nevada and Utah on the south. The most important tribes are the Thompson, Flathead, Nez Percé, and Yakima.

8. The Plains country between the Rocky Mountains and the Mississippi River. North and south this region extends from western Texas to the Saskatchewan River in Canada; the states comprised, all or in part, are Texas, Oklahoma, Colorado, Kansas, Missouri, Iowa, Nebraska, Wyoming, Utah, Idaho, Montana, North and South Dakota, and Minnesota; in Canada, parts of Alberta, Saskatchewan, and Manitoba. A number of linguistic families are represented here, some of which have representatives in other regions; the important tribes are Blackfoot, Crow, Dakota, Arapaho, Cheyenne, Kiowa, Shoshoni, Omaha, Pawnee, Osage, Hidatsa, and Mandan.

This is the best known type of American Indian and because of his picturesque face and wild life has been taken as the Indian type in art, literature, and popular appeal. He is the

Indian who wore the beautiful feather headdress, the leather shirt, gaily beaded moccasins, who lived in conical skin tents, to which the Sioux name, *tipi*, is given. Little comment on his culture is necessary. The country he lived in was largely grass land and originally the range of the bison. The presence of these large food animals made possible a free wild life and the introduction of the horse greatly accentuated the nomadic and war-like aspect of their culture. Some of them who lived near the lower Missouri and the Mississippi cultivated small patches of maize, beans, and squashes, but, primarily, all the tribes of the Plains were hunters. Pottery, basketry, and textiles were so weakly developed as to be nearly non-existent. Their tribal organizations were relatively simple and while their ceremonialism was numerically rich in rituals, there was little or no attempt to organize them into a close system.

9. New Mexico and Arizona. In this section, sometimes called the "Southwest," are found, among others, the Apache, Navajo, Pima, and the village Indians, as the Hopi, Zuñi, Acoma, etc. It is also a region rich in archæological remains, the most celebrated being those of the Cliff Dwellers.

10. Mexico. For the sake of completeness, account should be taken of the seat of the higher cultures in Mexico, Yucatan, and Guatemala, the remainder of Central America seemingly falling in with Colombia, South America. This was the seat of old Mayan civilization and the later Aztec culture. Architecture was highly developed and many famous ruins have been described in the literature. Also writing was practised.

SOUTH AMERICA AND AFRICA

Provisional regional cultures have been proposed for South America and for Africa.¹¹ In neither case are the data full enough to make so definite a statement as was possible in dealing with North American tribes. At the time of the Spanish conquest of Peru in South America there seem to have been two areas of higher aboriginal civilization, both in the narrow

¹¹ Clark Wissler, *The American Indian. An Introduction to the Anthropology of the New World*. Second Edition (New York, 1922); Melville J. Herskovits, "A Preliminary Consideration of the Culture Areas of Africa" (*American Anthropologist*, n. s. vol. 26, 50-63, 1924).

high Andean coast belt on the western border of the continent. In the north, comprising Ecuador and Colombia, were Chibcha-speaking peoples, whose culture was not so complex nor so highly organized as that of Peru to the south, but was characterized by agriculture by means of irrigation, fine cotton weaving, the use of suspension bridges, skill in working gold, and an all-round complex society. South of these Chibcha peoples were the Quechua and Aymara, ranging through what is now Peru, Bolivia, and Chile. At the coming of Pizarro, the Spanish conqueror, the Inca dominated this area and the culture of the time is usually spoken of as characteristic of them. The culture of the Inca region seems to have reached a high level: great development in architecture, domestication of the llama and its use in transportation, artistic achievements in textiles and pottery in fact, all the aspects of a high civilization, save writing.

South America is peculiar in that it is a ridge of mountains with lowlands upon one side only, and in contrast to the highlands we have just considered, these large stretches of lowland were occupied by tribes of low culture. With fuller knowledge, several culture areas may be found here, but at present there seem to be at least three, Argentine and Patagonia, the Amazon, and the coast belt of Venezuela and Guiana.

About Africa the data are less definite, but Herskovits has proposed nine culture regions: Egypt, the Sahara Area, Western Sudan, Eastern Sudan, the Eastern Horn, the Congo, the Bushman range, the Hottentot country, and the East African belt from the south tip of the continent to Egypt on the north. The Hottentot culture is characterized by the raising and use of cattle and can be spoken of as a true cattle culture. Cattle are also domesticated in East Africa, but less intensively, and seem to be secondary to an agricultural society.

This mere outline of primitive cultures is sufficient to indicate not only the practical value of treating tribal cultures as regional, but justifies the assumption of a regional point of view in attempting to interpret the phenomena of culture itself.

This brief outline of regional similarities in tribal cultures should prepare the reader to follow the discussion of the culture area concept. A more detailed statement, accompanied by

culture area maps, or regional cultures in the New World may be found in the author's *The American Indian*. To secure a clearer idea of a culture region, however, the reader should scan the pages in such books as Kroeber's *Handbook of the California Indians*, Goddard's *Indians of the Southwest* and *Indians of the Northwest Coast* and the author's *Indians of the Plains*. These books are summaries of the many special tribal studies for these respective regions and the careful reading of one of these should go far in providing the background for an understanding of the culture area concept.

THE REGIONAL CONCEPT

The phenomenon upon which the geographical school fixes its attention is the patch-like distribution of similarities in culture. The Plains Indians, for example, maintain a ceremony passing under the technical name of Sun Dance, formerly practised by a number of tribes, all neighbors; consequently, the geographical distribution of the Sun Dance covers a definite piece of territory, or has a continuous distribution therein. If we consider the logical possibilities in the distribution of this ceremony, an alternative might be that it occurred in a tribe here, another there, and so appears to be scattered over the country at random. In such a case, it would be necessary to suppose that these respective tribes were rapidly and aimlessly migrating, or that each tribe invented the ceremony independently. Yet, since we find no such distribution of this ceremony, or for that matter, of any known ceremony, anthropologists assume that one of the tribes concerned invented the ceremony and that the others borrowed it; but whatever may be the true explanation of its origin and distribution, one can, as a mere matter of observation, convince himself that the geographical distribution of culture traits is regional. Anthropologists conceive, therefore, that tribal cultures are not solely the creation of a single tribe, but are units in a regional development.

Further, strong emphasis is laid upon the influence of environment in such developments, i.e., upon the idea that it is the environment which causes tribal cultures to take regional forms. In an earlier chapter we commented upon the economic basis

to tribal life, and, if the reader will turn back a few pages to our résumé of culture regions in North America, he will note that each region is characterized by economic uniformity. In particular, the source of foods is not only uniform throughout each area, but varies with the region. The Indians of the Plains west of the Mississippi lived on the flesh of the bison, those in New Mexico and Arizona depended to an equal degree upon the cultivation of maize. In each case the economic life of the tribe concerned is nicely adjusted to the principal food resource in its locality, and this type of adjustment extends as far as the particular resource is available and no farther. The economic adjustment may be simple as that of the Eskimo and the Indian of the Plains, the Hottentots of Africa, etc., but, on the other hand, it may be complex, in that the tribes use a great variety of food, in which case the adjustment may be less obvious, because it has been made to a complex of conditions; yet, the type of culture changes where these conditions change. Other economic traits such as housing and costume show almost equal regional specialization. Since the demands of food, shelter, etc., are inexorable and, as we have seen, occupy most of the waking hours of the tribe, it is not difficult to see that in so far as tribal economic life is basic, just so far may we expect regional uniformity.

When we turn to other aspects of tribal life, social organization, ceremonial procedure, etc., in the pursuit of which many wish to believe the spirit of man free to do its will, there is also a large degree of regional uniformity. We have just called attention to the tendency of all traits of culture to manifest regional distribution, but further inspection of them will show that their distributions largely coincide with the economic type and so are restricted to the same region. It is this tendency of all tribal traits of culture to coincide in distribution with economic traits that gives a regional character to culture as a whole. However, this does not mean that every element of culture has the same regional distribution, for we have just listed a fair number of traits found almost everywhere. Also there are traits of culture that seem to have a continental distribution, or at least, cover a large part of a continent. In the New World, the cultivation of maize has a wide distribution, ex-

tending, roughly speaking, from Chile in South America to the state of Maine to the north; the cultivation and use of tobacco had at least an equal distribution. The use of fire is regarded as universal. However, when the details of cultivating maize, using tobacco, and kindling fire are closely scrutinized, they often reveal regional differences in procedure and in method. So, notwithstanding that all tribal cultures have something in common, the variations in procedure tend to conform to regional standards. Again, if we wholly ignore the tribe, and consider the various culture traits separately, we find all but those having a range approaching universality to be spread out upon the earth in continuous distribution, or in that sense to be regional.

In conclusion, we once more call attention to the concept of the geographical school that the tribal group is the first point of departure and that its total culture should be considered in its relation to the geographical region in which it is found. Emphasis is thus put upon the adjustment of tribal group life to the surrounding environment. In matters of observation and fact, the claim is made that we do not know a culture trait until we know its geographical distribution. The description of the culture trait, the tribes among which it is found and their geographical locations, are about all the verifiable facts available to us. This is the empirical basis to social anthropology.

SUMMARY

The geographical viewpoint as a research lead in anthropology is based upon the belief that the approach to every people is through facts of geographical distribution. One of the earlier conceptions of the geographical school was that migration accounted for the presence of a people or a culture in a given place. Where the older leads had placed emphasis upon the spontaneous origin of culture traits within the tribe, the new geographical school was disposed to regard the origin of culture traits to lie outside the tribal group. The immediate influence of the geographical lead was to popularize studies in geographical distribution and by this method the data of social anthropology are being enriched and systematized. We are

now able to enumerate such social procedures as are universal among living tribes or have a worldwide distribution. Further, distinctions can be drawn between highly localized social procedures and those found spread over large areas, which facts must be taken into account when the functions of these procedures are considered. Again, the study of distributions brought to light regional types of tribal cultures, the most significant contribution of the geographical school. It is now apparent that the phenomenon of social procedure is a regional development, rather than a worldwide movement, and that the facts of geographical distribution must be taken into account even in the study of our own society. In fact, the geographical lead gains strength from its universal validity for culture as a whole, primitive cultures, early civilizations, as well as contemporary life. The recent attempts to study delinquencies, social conflicts, etc., by first finding their distribution in a large city or rural area is an application of the regional concept to sociological processes.

CHAPTER XVIII

THE GEOGRAPHICAL METHOD

It is frequently said that anthropology is founded upon three classes of verifiable observations—place, time, and similarity. We may, for instance, wish to study the custom of cross-cousin marriage, and having determined its reality, we may observe where it occurs; that is, what tribes or communities follow it, and finally, critically examine these instances as to their similarity. In one tribe such marriages may be exclusive of other unions, in others they may be merely optional, etc., but having once established the identity of such customs among a number of tribes, we have two kinds of relevant facts—place and time. We have seen that geographical distribution expresses place of occurrence and it is assumed that a distribution, as given, is projected upon a time level. In the case of the above noted marriage custom, all observations within a century of each other might well be considered contemporary. On the other hand, we have noted that archæology recognizes distinctions in time, so that, to be consistent, archæological distributions must be projected on relative time levels. Naturally, human geography is first of all a view of man living upon the earth, as at present, and we may expect therefore that the geographical school of social anthropology will deal, for the most part, with contemporary peoples. So, when we speak of distribution without further qualification, it is understood that the culture phenomena considered are regarded as relatively contemporaneous. This does not mean that no consideration is given to such questions as to whether cross-cousin marriage, for example, is earlier or later in origin in a given place than some other marriage custom, for such problems are important and we shall consider them presently. The point to be noted now is that interpretations in anthropology must be based upon reasoning with these three basic facts. It is, of course, possible to reason

with two of them, as, place and similarity, when one cannot discover whether the customs considered arose simultaneously or in succession. The experience of mankind commits him to the belief that one custom grows out of others, and so on, and so one of the important problems is to discover this succession. Morgan set himself this task with respect to relationship systems and marriage and we saw how he tried to solve it by reasoning from facts of similarity, rather than of time and place. He assumed, first of all, that different types of tribal cultures indicated difference in time, but this assumption was not critically checked by observation. Further, he did not consider place important. As we have said, his observations of relationship systems and marriage customs followed methods of objective procedure, but the modern geographical school insists that place is essential and that time should not be ignored. The latter, however, is the type of observation emphasized by the archæologists.

As we have said, the geographical lead, or insight, was that the ultimate distribution of a custom was an approach to its understanding. The strength of this lead lies, first of all, in that it is based upon objective facts, capable of verification. It stands, therefore, as an empirical method. All the important leads in anthropological research have possessed this quality.

PLACE OF ORIGIN FOR SPECIFIC CUSTOMS

One objective approach by the method of distribution has been through the place of origin for customs, inventions, beliefs, etc. To take an example in the large, before the discovery of America, maize was grown in adjacent parts of North and South America, but not in the Old World; as a parallel instance, wheat was grown in the Old World, but was unknown in the New. Anthropologists consider this satisfactory proof that maize originated in America and wheat in Eurasia. The maize and wheat culture complexes are thus localized. It may profit the reader to compile a list of similar separate distributions and to work out their interpretations. Yet, when the attempt is made to determine the particular place in which maize was domesticated, the procedure is not so simple. In fact, about all

that can be done in this case is to seek the home of the wild ancestor of maize, assuming that its habitat would be the place of domestication. Since this ancestor has been found in Mexico and Central America, we consider it probable that the cultivation of maize began somewhere within that territory. It may be that the domestication of such a plant arose outside its habitat because a tribe wishing to avail itself of the food used by other tribes living within the natural range of wild maize, tried to transplant it. Yet, this would occur more likely on the borders of the range of the wild plant. Thus, it is, by considering the distribution of the wild plant in relation to that of the domesticated one, that an interpretation which seems to possess very high probability is reached. The distribution of the cultivation of maize on the one hand and the distribution of the wild plant, on the other, are objectively verifiable. It is noted that the former extends in almost unbroken sequence from Chile in South America to Maine in North America, while the latter ranges between Panama and Mexico City. If we compare the relation of one distribution to the other, it is observed that the more restricted one lies over the heart of the larger distribution area. Thus is established a fact of relationship between distributions which challenges interpretation. The natural explanation is that the plant was domesticated in or near its wild range and that in course of time its use spread outward.

This example of the use of the geographical distribution as a method of inquiry serves to call attention to the importance of the relation of distributions to each other. If widely separated, as in the case of maize and wheat, a different interpretation may be given to the question of origin, from that given where the distributions overlap. In general, regardless of whether we can determine the place of origin or not, knowledge of the distribution will define the problems within narrower bounds. Thus, knowing the distribution of wheat in the Old World, the problem as to its wild ancestor becomes more definite: the place to seek it is well within the area of distribution. We see then justification to the claims for the geographical method in dealing with culture problems.

AGE AND AREA

As stated above, time is an important factor in the consideration of culture data. The study of plants and animals has developed a concept which may be characterized as age and area. In general terms, it is assumed that a wide geographical distribution is older than one of restricted range. Thus, if two related species are believed to have descended from a single parental type, and one is spread over a large and the other over a small area, the presumption is that the first is much older than the second. Applying this concept to culture data, we might say that the use of fire by man is a very old culture trait because it is distributed over the whole earth. In an earlier section we enumerated a number of practices and customs that seemed to be universal among mankind and to have a worldwide distribution. Totem poles, on the other hand, are peculiar to the coast of British Columbia and Alaska. The assumption is then made that such poles are quite recent in origin, in contrast to the use of fire. This method has been used by Kroeber to enumerate the characteristics of early New World culture.¹ He approaches the problem by comparing the distributions of related processes and customs. For example, in weaving, he observes that simple basketry and the weaving concept are universal from Alaska to Cape Horn, and regards this as indicating that the first immigrants to aboriginal America were weavers, or at least, that they knew the first steps in the process. It is not assumed that they were weavers of cloth because that process has a restricted distribution. According to his observations, the distribution for the types of weaving found in America vary in extent as follows:

5. The loom with a mechanical shed.
4. The true loom with a weaving bar.
3. The weaving frame.
2. Weaving with suspended warps.
1. Simple basketry.

For an understanding of the processes involved in each, the reader should consult the literature. It may be sufficient, however, to say that the processes, as listed above, in themselves,

¹ A. L. Kroeber, *Anthropology* (New York, 1923).

seem to present the logical steps in the development of weaving as we know it in our own culture. With respect to age, however, Kroeber assumes that the order of magnitude in distribution gives the succession in time; thus, simple basketry is the oldest element in this technological complex, while the mechanical shed is the most recent, the order being that indicated above. This is an example of how the concept of age and area has been applied in investigating the time relations between customs.

That the method can be applied to social data in the narrow sense is shown by the same author. He finds that certain ceremonial practices take the following order when their distributions are compared:

5. Human sacrifices.
4. Temples.
3. Priesthood.
2. Secret societies and masks.
1. Shamanism and rites.

Human sacrifice is thus given a more recent origin than the building of temples. Adding one other example, we have:

5. Empire maintained by conquest.
4. Confederacies and political organization.
3. Exogamous clans, female line.
2. Exogamous clans, male line.
1. Non-exogamic, non-totemic bands.

It should be noted, however, that many contemporary anthropologists are inclined to doubt the evidence of distribution as furnishing sufficient proof of the order of development, but no one denies it some weight. If the facts of distribution are fully known, then such relations between distributions as we have pointed out have some bearing upon succession in time. When discussing the archæological method, we noted how successful its followers had been in recovering time sequence; it should therefore be possible to determine in how far such distribution data agree with the results of stratigraphy. Such a check has been made in one instance by the archæologist, Nelson,² who determined the successive positions of several styles of pottery

² N. C. Nelson, *Chronology of the Tano Ruins, New Mexico* (American Anthropologist, n. s. vol. 18, 159-180, 1916); Clark Wissler, *Man and Culture* (New York, 1923).

in a deep refuse heap found at a prehistoric pueblo Indian site in the Rio Grande Valley, New Mexico, thus by archaeological methods determining the order of their appearance at that place. When this result was compared with the data for the geographical distributions of the same pottery styles, it was observed that if arranged according to the size of the area covered, this serial order was the same as that observed by stratigraphy. In this instance, at least, the relative extent of the distribution did give the correct time sequence.

It should be noted that in the preceding example of pottery styles, we deal with closely related technological processes which seem to evolve out of one another. This was the case, also, in the time order of development in weaving; the weaving frame, for example, was an improvement over the suspended warp. It is assumed, therefore, that weaving has a venerable history, beginning in simple finger manipulation, but that from time to time mechanical devices were developed. The history of the modern loom is known, but the time and place for the invention of the simple loom and other devices used by non-historical peoples cannot be recovered except by archaeological methods or by the method of geographical distribution. It is the latter alone that gave the time sequence previously presented, which suggests a definite time order of development. Yet, even without distribution data, we can feel certain that finger weaving, without a frame, preceded the bar loom. On the other hand, if we wish to know whether the loom in America is older than the use of temples, we face a more difficult problem; their respective distributions can be compared, it is true; temples are less widely distributed than looms, which fact, according to the method of interpreting distribution in terms of time, would lead to the conclusion that temples were more recent. One may be justified in hesitating in this interpretation because a temple is a device in one line of development and weaving in another. We lack evidence by which to synchronize the successive developments from shamanism to human sacrifice, on the one hand, and weaving on the other; if, however, the distributions for these two lines of development overlap, then their contemporary relation may be suspected.

Elsewhere⁸ the author has discussed the overlapping of distributions, calling attention to the peculiarity of distributions in superimposing over a common center, or for distributions to be concentric. Thus, the distributions of the five steps in weaving are found to be superimposed, the central part of each distribution being in the highlands of Mexico and the northern Andes. This is also the approximate territory in which the superimposed distributions for the religious series center. This could be interpreted as indicating that the submerged factors that led to the development of temples also led to the true loom. In an earlier section we dwelt upon the regional nature of culture and now we see in the distributions, especially in their pyramiding, a tendency to center in the same place, in the examples cited, indicating that the center of development for the religious and the weaving culture complexes, respectively, are approximately coincident. It also happens that a number of other important complexes show the same coincidence, from which we infer that their developments were, in general terms, coincident.

In conclusion, then, there seems to be justification for interpreting differences in area as differences in time, especially when based on the comparison of units or steps within a single line of development. It is also safe to interpret as ancient worldwide distributions under primitive conditions. The time relations between a number of concentric distributions are not so clearly indicated, but when they center in the same narrow region, they may be suspected to be synchronous developments. In all cases, however, checks by archæological methods are desirable, since the rates at which distribution areas are formed may vary.

CONCENTRIC ZONES OF DISTRIBUTION

Pottery and stone implements are relatively indestructible and so can be found wherever once used, but it is different with objects made of perishable materials and with customs. When one kind of basketry replaces another, rarely can a trace of the earlier type be recovered; much less can a variation in the form of marriage be discovered unless the change was recent enough

⁸ Clark Wissler, *The Relation of Nature to Man in Aboriginal America* (New York, 1926).

to be noted in tradition and, even then, checks are needed before traditional evidence can be accepted. It has been observed, however, that elements of a culture complex involving perishable objects may show concentric zones of distribution.

The method of holding the arrow to a bow, in archery, may serve as an example. There are three main types of arrow release, to use the customary technical term, which may be designated as *A*, *B*, and *C*. *A* stands for the various methods of holding the arrow between the thumb and the first finger; *B*, for the so-called Mediterranean release, where the arrow is held between the first and second fingers; *C*, for the special Mongolian pull. As may be surmised, the Mongolian form is peculiar to a zone extending through the middle of Asia; type *B* occurs in zones on either side of *C*, whereas *A* lies outside of *B*. From the distribution alone, we may infer that *A* is the primitive form of arrow release and that *C* is the latest. The question, however, arises as to whether *A* once prevailed in the zones now given over to *B* and *C*. The inference is that it did. Also it would follow that *B* once prevailed in the region now characterized by *C*, assuming that the inventions followed the time order *A*, *B* and *C*. In the same way, the series for weaving, previously presented, would show the order of invention. Yet, many anthropologists hesitate to accept these interpretations as final and so far have not made much use of this method because the strict interpretation of the distribution as a time sequence also commits one to the assumption that the central core of the distribution area is the place in which each successive invention was developed. Thus, the inference would be that both the Mediterranean and the Mongolian arrow releases originated in the heart of Asia. Since both releases are historically old and great changes in the centers of civilization are known to have occurred in early historic time, one may well hesitate to accept the interpretation in full, without some historical data. On the other hand, there seems no reason for serious doubt that the Mongolian release originated in Asia. In respect to the distributions for weaving and religious practices in North and South America, the centers for which lie in the highlands of Middle America, the interpretation would conform to the accepted opinion that most of the more complex phases of aboriginal cul-

ture in the New World originated in the highlands of Central America and Peru. Since many distributions thus tend to center in one region it would seem that all important phases of culture tended to originate in the same place. Since there is no obvious reason why this should be true, anthropologists are conservative in their attitude. So, while most anthropologists take the position that such superimposed distributions as we have just considered are not sufficient proof for place of origins and time sequence, they have nevertheless a high degree of probability and, if supported by other evidence, may be accepted as proof.

The validity of the distribution method depends, however, upon the fullness and accuracy of the data. In such an example as the arrow release, one would need full data from almost every tribe in the world as well as some historical data as to migrations and conquests. The existing information approaches this ideal, but still leaves something to be desired. For weaving and certain religious practices in the New World, the data may be said to be reasonably complete. When, however, the method is applied to smaller areas the data must be quite exhaustive. In conclusion, it appears that the distribution method promises to be an important approach to the problem of origin and time sequence. There is need, however, for the intensive study of sample distributions in order to clarify this method.

THE ENVIRONMENTAL PROBLEM

We noted that in human geography the emphasis was placed upon the adjustment of man to his surroundings, or, the problem of human ecology. It is usual to assume that the geographical school looks to the geographical environment for the causes underlying the development of culture. Thus, it is held that the Indians of the Plains were semi-nomadic and lived on the bison, because that was the easiest way to live in such a country. The economic basis to culture, considered at the outset, is obvious, but, on the other hand, we have seen the tribal group as an active and not a passive agent in relation to the environment. A tribe exploits some of the resources in the surrounding environment. It does not exploit all of them at

the same time, but specializes in a few. In the discussion of regional culture types, it was noted that many successive culture types could find homes in the same geographical environment. Thus, a hunting culture once prevailed in England, later an agricultural mode of life developed, and now the culture of England may be characterized as industrial, yet the environment is the same.

It seems, then, that the relation between culture and the environment is rather a dynamic one, in that a culture type is, in fact at least, an exploitation of the immediate geographical environment. A small tribe of a thousand adults or less—and we have seen that most tribes are small in number—cannot carry on a culture comparable in complexity and richness to that in modern England; such a small group must specialize narrowly, not only in food production and material matters, but in social and intellectual life as well. What the tribe exploits among the many material resources of the habitat may or may not represent the line of least resistance; no one has studied the subject from this point of view. We can, however, see certain advantages in a number of tribes living in the same environment and simultaneously exploiting the same resources. If a tribe lives in isolation, it must improve its methods by its own efforts, but if other, even hostile, tribes live near by, each can profit by the inventions and ideas of the other.

The environmental problem hinges upon the degree to which all the tribes in a region conform to one mode of life. The Eskimo, we are told, live only in Arctic lands; the Plains Indians lived on the open plains where the bison were found. Yet, as we have observed, the ceremonial practices and art of the Eskimo are not found beyond the limits of Arctic environment and such practices as the sun dance, age societies, etc., are found only in the plains, in the bison country. On the other hand, no one has been able to demonstrate a causal relation between the environment and such non-material traits of culture. The environment really holds together the tribes occupying a region, and develops a community of interest and concentrates leadership within itself. The tendency for a bison-hunting tribe is, first, to confine its wanderings to the bison range; secondly, to observe and to fraternize with other bison-hunting tribes.

Under such circumstances, it seems inevitable that the tribes within a region should follow much the same round of life. The influence of the environment thus appears as a passive limiting agency rather than a causal factor in the development of tribal life. It is further probable that the concentric zones of distribution are largely a result of the limiting nature of the environment and time.

ETHNOGRAPHY

It seems appropriate to give passing attention to the facts of human geography. While the geographer is not an anthropologist and does not concern himself with the main problems we have so far considered, he does collect facts concerning the tribes and nations of the world. He even characterizes them, though wholly in a descriptive sense, according to bodily features and modes of life; but, above all, he defines the tribal habitat. In the older literature the term, ethnography, was used to designate studies of this character. The great geographers were, in part, ethnographers, and such comprehensive works as Ratzel's *History of Mankind* are almost wholly ethnographic in character. Further, many of the descriptive memoirs on tribal cultures are, for the most part, ethnographic. Yet, no particular weight is now given to the distinction between ethnography and geography, on the one hand, and social anthropology, on the other. The exploration of the world is now all but complete: a few tribes may be added to the list in the near future, but the end is in sight. On the other hand, while exploration was in progress, it was necessary to locate tribes, define their habitat, and note some of their characteristics. This task, like all others of the kind, required training and special fitness on the part of the explorer and especially on the part of the ethnographer who completed the maps and the records. It was the close relation of geographical problems to tribal cultural problems, or the apparent relations between them, that gave rise to the human geographical school, destined to influence modern anthropology profoundly. No one had previously considered the facts of geography as relevant to problems of social origin. Further, the geographers seem to have

been the first field ethnographers, in the modern sense; on the other hand, it is unfair to say that all field-work in social anthropology emanated from their pioneering efforts, for Lewis H. Morgan, who was not in any way geographically minded, was also a pioneer, if not the initiator of field study in cultural phenomena. It was later that the American school of anthropology combined, as it were, the objective methods of Morgan with the geographical methods of the German human geographical school. It may be said, then, that ethnography, the more specialized descriptive human geography, was the preliminary approach to the problems of modern anthropology, furnishing a body of facts from which anthropology evolves many of its problems.

SUMMARY

The geographical method in the study of culture is essentially a process of correlation in space and time, particularly the former. When the geographical distributions of culture phenomena are known, such distributions, when plotted on a map, are found to be more or less coincident with geographical data. It is thus that the environmental problem is approached. The distributions for related traits reveal a tendency to concentric zoning and experience with certain archæological data suggests that time differences are expressed in such zoning. This is analogous to the concept of age and area in biology, those species presenting marginal and so wider distribution being regarded as the older. It is therefore probable, that on the basis of geographical distribution distinctions can be made between older and younger culture traits. This method has been used by the American school of anthropology in the study of social organization, mythology and ceremonies. Finally, the relation between the environment and tribal cultures seems to lie in the incidental limiting of the distribution extent, rather than in the active formation of culture traits.

CHAPTER XIX

THE CULTURE AREA CONCEPT

To define the anthropological concept of culture is the most difficult task confronting us. We have previously noted difficulties in comprehending the phenomena studied by anthropologists. This applies especially to the concept of tribal cultures; one must, through field-work, be in direct contact with them before they become realities in experience or before one can understand them. Yet, if the course suggested at that time has been followed, the reader may have acquired some insight into the culture problem. Of course, he lives in a community and in that respect shares in a culture, but being so much a part of it, and so completely habituated to it, makes it almost impossible to detach himself and observe it without personal bias. If, however, one visits a community of less civilized people, he can without difficulty take an objective view and so begin to realize what the culture phenomenon is like.

Perhaps the most serviceable definition of a tribal culture is to say that it is the aggregate of standardized beliefs and procedures followed by the tribe. This statement would rule out individual opinions and practices, but include such as are regarded as "the way to do." Under an earlier head we commented upon the large number of such beliefs and procedures found in the culture of a small tribe, which accounts for the small number of complete studies available in anthropological literature. It may be instructive for the reader to cast up the number of beliefs and standardized procedures, occupations, etc., he shares in common with the community in which he lives. This will show the magnitude of the task to be faced if one sets out to make a complete study of a tribal culture. Further, it should give some idea of the capacity of the individual to learn and practice such activities. This is a fundamental human trait and while there may well be some difference in this respect be-

tween primitive and civilized peoples, as psychologists suspect, even the most primitive tribes known maintain cultures of astonishing complexity, as we have noted in these discussions. The psychological point of view is that what we call culture is the total species behavior of man.

It is true that cultures differ from region to region in their adjustments to the environment, but, on the other hand, they are strikingly alike in form and extent. Languages differ from one another, but all seem capable of expressing the same emotions and ideas. Tribal organizations, while differing in details, provide for the same contingencies throughout, feeding, housing, clothing, care and training of children, entertainment, regulation of conduct, etc. If the reader will construct a topical outline of his own culture and compare that with one or more of the relatively complete tribal studies available, the nature of the general pattern for culture will appear. Yet, as we have said, social anthropology is chiefly interested in the differences between cultures, seeks to define them accurately and then to explain how they came to be different, leaving to psychology and biology the task of noting what is universal in the behavior of man. The point of view in these biological sciences is that the individual inherits the necessary equipment for learning the requirements of community life and this inborn equipment determines the limits and, in general, the form of human behavior. Many anthropologists refuse to believe that anything related to culture is inherited, that culture is something man accidentally fell into and is just as likely to fall out of again, though they admit that man and culture have been associated ever since the Old Stone Age. However, this is a philosophical question, bearing little relation to research in social anthropology, in which we should be concerned with specific problems. Culture is present and demands investigation, if we are to achieve a better understanding of community life.

As we are now engaged in a retrospect, some repetition of previous discussions cannot be avoided. We have noted the tendency of certain contemporary social anthropologists to view a tribal culture as a unit and to decry any attempt to deal separately with any phase of it. This attitude is wholesome, but may easily be over-emphasized. A tribal culture is too massive

to be comprehended as a whole, without analysis and detailed studies of its parts. It is inevitable, therefore, that a culture, when studied, should be taken up element by element. Yet, when we try to segregate the elements of culture we find it difficult to draw the line because customs and procedures are interlocked. If, for example, we observe the use of snowshoes and record that as a culture trait, we must still seek the methods for their use, how they are made, social etiquette concerning them, beliefs and artistic emotions associated with them, property in, etc. The snowshoe thus stands for a complex of beliefs, techniques, and procedures that must, to some extent, be considered a unit. Further, parts of the technique for making snowshoes will be used in the fabrication of other objects: the art motives used, beliefs, property value, etc., may be associated with other objects and procedures. It is this meshing of culture traits that has led to the use of the term, complex, and so we speak of the snowshoe complex, instead of attempting to reduce these associated procedures to indivisible elements. Naturally, if we confine our attention to material objects, these can be treated separately, as snowshoes, shields, bows, arrows, spears, etc. If, however, we are concerned, as is the case in social anthropology, with the functions of such objects and with processes and procedures, then we must deal with complexes rather than elements. Returning to the initial question as to the unity of culture, it then appears that the complexes comprising a culture can be taken up separately in an investigation, but that in functioning in tribal life they tend to interlock. It is in this respect that the idea of culture as a unit is justified and it seems in part true that a culture complex should be considered in its relation to the tribal culture in which it functions. Nevertheless, complexes can be studied separately and their distribution from tribe to tribe followed to the end, without unduly distorting the facts. Finally, we may conceive of a tribal culture as a number of interlocking complexes of belief and procedure.

Confronted, as we are in social anthropology, with hundreds of tribal cultures, it is necessary to classify them. This is done by noting the complexes they have in common and, when grouped according to similarities in this respect, tribal cultures

are found in regions, as stated in the preceding chapter. The method used to discover the culture regions into which a continental area may be divided, is to classify the known tribal cultures and to locate them upon a map, which automatically defines the culture regions. The similarities between cultures both resemble and differ from those between languages. Languages show either many or a very few points of resemblance. They do not evenly grade into each other. In language this is construed as indicating a common origin, on the one hand, and an independent origin, on the other, assuming that languages closely related will possess many points of resemblance, whereas those not so related will show practically no points of resemblance.

The distinctions between cultures are not so marked: nevertheless they stand out because the basic economic and social traits tend to differentiate them sharply. In the classification of tribal cultures it is customary to select two or more tribes as types, and to group the others around these, and if these selected type cultures are compared, the differences will be conspicuous. On the other hand, if we closely observe the several tribes within a class, we find them varying in many traits, or presenting a considerable degree of variation. Nevertheless, the classification is workable and no more arbitrary than other forms of classification.

One of the oldest forms of classification is by general economic type, as hunting, agricultural, pastoral, still useful as general descriptive characters. Recently Hobhouse extended this classification by creating sub-classes, as:

Lower Hunters	Pure Agriculture
Higher Hunters	Higher Agriculture
Dependent Hunters	Lower Pastoral
Incipient Agriculture	Higher Pastoral

This classification requires an evaluation of tribal cultures, a method of which this author has made effective use in investigating the relations between culture complexes. Morgan, also, in his day, rated cultures by a scale of values in family and social organization, but was far less successful in its use as a research method. Such classifications are justifiable as

methods in specific problems, but a classification, such as we have suggested, based principally upon structural similarities and, secondarily, upon geographical characters is less committed to values and so is more flexible. It enables one at least to speak and deal with the cultures of the world with a minimum of commitment.

CULTURE AREAS

The foregoing review of culture phenomena may serve as a background for presenting the culture area concept. We have noted that when tribes are classified according to similarities in culture, they take regional distributions which closely conform to the ranges of the animals or plants upon which the tribes base their economic life. It is assumed, also, that some kind of reciprocal relation holds between the climate, fauna, and flora of the region and the culture of the tribes concerned. In biological literature the conception of this relation is designated as ecology and investigations are carried on in the hope that the factors and processes involved in this relation can be isolated. At best, the ecological conception seems justified in the case of animal and plant life, where we observe a nicely adjusted balance, the one to the other, and to the geography of the region. As we have stated, the geographical school regards the adjustment of the tribe to its surroundings as a sufficient explanation of its culture. However, without committing ourselves to any of these interpretations, we see the culture area as a geographical region in which reside a considerable number of relatively independent tribes with similar culture. The similarity lies in a core of important culture complexes held in common.

Like other concepts we have discussed, the importance of this one should be estimated according to the problems raised and the degree to which the phenomena involved lend themselves to objective methods. For one thing, it is desirable to know how a culture grows; if, as many profess to believe, tribal cultures are always in process of change, at irregular rates, how does it happen that the tribal cultures in one area are so similar? It is known that tribes, like individuals, are influenced by each

other, and so it is regarded as certain that the common culture complexes in a culture area are more or less joint products of the tribes concerned; hence, how and what each contributes to the whole, becomes an important problem. There is reason to believe that the culture area is the larger unit in the phenomenon, or that it is a community of tribes; if so, here is a procedure worthy of study. Science is characterized as a procedure by which principles of wide validity are discovered. We have seen that the human community was universal and that certain types of response on the part of the group were also universal; hence, we are dealing with something of wide validity. We expect the same behavior processes to operate within each community. Further, we have shown the tribal culture to be such a process. The question now is whether the concept of the culture area has wide validity; our discussions of regional phenomena fully justify the expectation that it has. We anticipate that, as archaeological research advances, extinct culture areas will be discovered and thus give us a clearer understanding of how culture operates. In general, then, the culture area concept promises to be a lead in social science.

CHARACTERISTICS OF A CULTURE AREA

In our discussion of population we noted the small size of tribes as compared to modern states and the relatively large range of unoccupied lands to which they laid claim as hunting and camping grounds. When we speak of a culture area in geographical terms, all such lands are included, as well as the occasional strips of "no man's land" that lie between. A culture area is delineated by listing the tribes with similar cultures and plotting their habitats upon a map. The geographical shapes of culture areas appear to vary according to the topography and other physical factors that enter into the environmental complex. The culture regions, previously enumerated, may be taken as indicating culture areas which the reader can plot upon an outline map. He will note that the area of Eskimo culture is a relatively narrow coast belt extending from the Aleutian Islands around to the eastern side of Greenland. The area of Plains Indian culture, on the other hand, is roughly

as wide as it is long. If we visualize these two areas in terms of the tribes that comprise them, then, in the case of the Eskimo, we see a long row of communities, in open formation, skirting the Arctic coast of North America, Greenland, and the intervening islands. The Eskimo are relatively uniform in language and biological type throughout, and live in, approximately, four hundred camps. The total Eskimo population, at present, is estimated as 28,000. Yet, reference to a good map, particularly one showing the habitat of the Eskimo, reveals that the southern shores of the islands north of Hudson Bay, as well as the adjacent shores of the continent, are occupied. The Eskimo area therefore is not wholly linear, but presents a central body of fair breadth in contrast to the two wings. Turning to the Plains Area, we note that it takes the form of an irregular polygon about as wide as it is long. The thirty-one tribes generally regarded as comprising this area lived in something over one hundred subdivisions. Each of these subdivisions was further separated into bands, as previously stated, totaling something over one thousand communities. The tribe comprised clusters of these communities which were separated from each other, in most cases, by intervening hunting grounds. The population of the Plains Area, around the year 1800, is given by Mooney as 119,500.

Other culture areas, while manifesting individuality, give comparable pictures varying with their shape and the density of their populations. The reader should, however, familiarize himself with a few more North American areas as a background to this discussion.

We have spoken of the geographical region corresponding to a culture area, as if it were a unit. It is in a sense, though not uniform throughout. The climatic range of the Eskimo varies from the somewhat open winters of the Aleutian Islands to those of the ice-bound coasts around Hudson Bay and eastward. Winter sealing through holes in the ice is the chief dependence and, hence, the localities most favorable to sealing are the most favorable to the Eskimo.

If, in the same way, we analyze the situations in other culture areas, it appears that the economic resources upon which the tribes depend are most available in some one part of the area.

This is no more conspicuous in hunting and pastoral culture areas than agricultural culture areas, since every agricultural area has a fringe of less and less productive land.

Turning now to a comparison of the cultures of the tribes in a culture area, we observe that they also are not uniform throughout, but vary one from another, and seem to grade into each other as we pass across the area. Thus, Kroeber, in discussing the California Area, notes how, as one approaches the central part of California, the several tribes become more and more alike in culture. To reverse the observation, the culture traits common to the tribes at the center tend to fade out as we proceed outward. This is sometimes spoken of as the gradation of cultures.

Other areas present similar relations in the cultures of their tribal constituents so a generalization seems justifiable. A culture area will comprise a nucleus of two or more neighboring tribes around which the others range roughly according to their degrees of similarity to this central group. In the main, if one traveled outward from this central group, he would observe that the cultures of the successive tribes, while preserving the main economic characteristics of the central group, gradually varied in the form and identity of culture traits. As we shall see later, this outward gradation from the center is one of the significant characteristics of a culture area.

In an earlier paragraph we noted how the geographical region in which a culture area is found tends to have, well within its borders a heart, or core, in which the natural resources upon which the tribes of the culture area depend for their existence, are particularly abundant. It seems that in the culture areas of the world, so far determined, the tribes forming the nucleus of the area occupy this same geographical center, the most favorable environment for that type of culture. This is why the cultures of these central tribes are often spoken of as typical, or as presenting the characteristics of the area in purest form. The remaining cultures are considered marginal and, if these marginal tribes are neighbors of those marginal to an adjoining area, they will be intermediate between the two culture centers. For example, the Indians of the Plains had, adjoining them on the east and south, other culture areas where maize was culti-

vated and pottery made: both of these arts were found among the corresponding marginal tribes of the Plains Area. On the north, the California Area approached the North Pacific Coast Area, and we find the intermediate tribes between these two areas building rectangular wooden houses and making fine baskets.

While it is clear that the geographical region has a powerful influence upon every type of primitive culture, it does not follow that future or past culture areas will have the same boundaries, even if there are no climatic changes. The economic basis to a culture area may change, as, a hunting culture may be displaced by agriculture. The boundaries and center of the former would depend upon the distribution of the chief game animals and the mode of hunting; whereas for the latter they would depend upon soil and climatic conditions. Even a change from one type of hunting to another might conceivably shift both the center and the boundaries. History and archæology furnish sufficient evidence to justify these statements.

CULTURE CENTERS

It is sometimes objected that the term culture area implies too great a measure of exactness in the definition of geographical boundaries, whereas the presence or absence of culture traits can not be stated in such precise terms and that the use of the term culture area and its delimitation upon a map, implies an exactness not inherent in the data. We have approached the culture area concept as an outgrowth or a crystallization of the geographical point of view, and consequently emphasized its geographical aspects, but the phenomenon upon which the culture area concept is based is not geographical, in the usual sense of the word, but is expressed in similarities in tribal cultures. It is only when the habitats of tribes having similar cultures are plotted upon a map, that the geographical aspect of the situation appears. If we fix our minds upon the similarities of tribal cultures, we can arrange them in a graded series, those nearly identical in one column, those less similar in another. We can stop here, and inquire as to the reasons for this grouping, framing our discussion wholly in terms of

culture similarity. The usual assumption in such cases is that the identical tribes are the dominant influences in the development of the culture type and that the less similar tribes follow their lead. There is thus a center of influence in shaping the cultures of the tribes involved, and from this point of view, a culture area is a region embracing a culture center. When, for example, Kroeber calls our attention to the existence in California of a central group of tribes whose cultures are typical, or closely similar, and that the similarities tend to fade out as one passes outward in the area, he is suggesting a culture center for the California Area.

Centers of culture influence have been recognized in the Old World. At one time Greece was such a center from which radiated many culture traits in art, literature, philosophy, science, etc. Egypt was another. Even within the United States we recognize centers of culture influence which draw into themselves individuals and ideas, moulding them in social procedure and values, which are in turn radiated outward. The difference in this respect between the modern and the primitive world seems to lie only in the size of the political groups involved. In comparison with modern nations tribes are small, but they influence each other in culture just as do cities and towns in our own country. So the idea of a center of culture influence is not new, it is an old idea of long standing, reflecting the experience of civilized man.

This serves to clarify the conception of the culture area, since we now see it as comprising a nucleus of tribes developing a type of culture which influences a fringe of outlying tribes. It is then of little moment whether the ultimate boundaries of the area be precisely defined, because the culture influences of the central group may conceivably fade out gradually and in some instances affect a whole continent. We can, however, define the nucleus with fair precision, in fact, do so when by comparing tribal cultures, a few representing the type are designated. A culture area is, then, a region within the bounds of which is a group of tribes, closely similar in culture, which tribes manifest the regional culture type in its purest form and lead in its development. This central group of tribes constitutes a culture center.

As we have stated, the conception of culture centers applies equally well to modern life. For example, students of modern economics know that the development of power from coal and the resultant industries are the outstanding characteristics of Europe and the United States. Further, the mechanization of modern life by steam, gas, and electrical power is the framework of the greater part of contemporary culture and stands as the index of a type of culture, as we have used that term. In this case, also, the development is regional and takes the general form of a culture area. Thus, it is stated, that the combined consumption of coal, oil and water power in the United States and Europe comprises more than 90 per cent of the total world production. Everyone knows how the use of power in transportation and industry is spreading in the world, but few have considered how like a culture area the phenomenon appears. If, for example, we consider only the localities where power production is the greatest, northeastern Europe and northeastern United States, a center for this culture type is observed in which a very large part of the world's power is produced. From this center emanates a strong influence for the diffusion or spread of industrialization and power production. With this diffusion go the less material traits of American and European culture. Also as one proceeds outward from this great power and industrial center the same fading out of culture characteristics is observed as in primitive culture areas.

RELATION TO THE TRIBE

Accepting for the moment the emphasis which the geographical school places upon the tribe and group, or community, as the culture unit, we have reviewed regional phenomena as due to the functioning of tribes as units. It is possible, however, to ignore the tribe and look only to the distribution of specific culture traits. For example, the use of acorn meal as a staple is characteristic of California Indians, its geographical distribution can be stated in detail and, if desired, plotted on a map. In the same way the extensive use of the bison as a food can be plotted for the Plains Indians. If we go on in this way, plotting many culture traits, we will observe certain peculiar

overlappings in distribution; for instance, the use of a tipi will be found largely coincident with bison hunting; so are the sun dance, age societies, and other traits. Of these, the tipi and bison hunting have a wider distribution than the sun dance and age societies, particularly the latter. It will be observed, however, that the smaller distributions fall well within the larger ones and so define a center of coincidence. This center might be taken as the center of influence and so as a culture trait center. In one way, this procedure appears more empirical than the classification of tribes as a whole, but in the end it would amount to the same thing, except that the point of view may be different. Viewing the traits individually, the tribes appear as population units, operating biologically and politically, and adopting or rejecting such culture traits as come to their knowledge. The problem then takes on this form: how is it that the extents of the several trait distributions vary so greatly, whereas they all tend to overlap in a kind of center? We can conceive of a random scattering of their distributions over the continent, if each tribe were free to choose and devise its own culture. It is because trait distributions are not so scattered that we see a problem in this culture center phenomenon.

There is a further advantage in regarding the separate distributions of culture traits rather than the distributions for tribal culture types. The reader is already aware that after certain culture centers have been located, traits of wide distribution will be found common to two or more centers. Such traits are frequently encountered in material culture, as for example, the cultivation of maize, which extended over several culture centers. When studied alone, the maize culture complex seems to have a center of development in Middle America; further, a number of other traits seem to center in the same place, suggesting a kind of super-center for the basic traits in American Indian life. Going somewhat further afield, distributions like the bow and methods of releasing the arrow suggest a single world center. Such facts as these have been cited as contradicting the validity of the culture area; but the confusion lies in the different modes of approach. By the culture area, is meant an aggregation of tribes conforming in whole or in part to a type of culture as defined in terms of specific traits. Culture

centers are thus revealed. However, these centers not only influence the neighboring tribes but one another. The study of widely distributed traits does not reveal contradictions to the belief in culture centers, but, on the other hand, tends to reveal the leading centers of culture influence in the world.

This is a convenient place for calling attention to certain differences between the modern European and the American schools. The latter leans heavily upon the idea that the culture of a tribe is to be taken as a living whole and, therefore, that the regional development of culture is the correct approach. The former takes up culture traits separately and follows out their distributions to their ultimate limits. The interest of the European school is mainly to discover where the specific culture traits originated. We have considered the value of distribution data in reconstructing the history of culture traits and so need not refer to that method again. Such a view places no value upon the idea that culture is something living and functioning in a community as its social life, its sole interest being in inventions and objective forms of social procedure. Which of these interests is the more important, is a matter of opinion; each is susceptible of satisfactory objective treatment and has a contribution to make to our understanding of culture.

In general, then, it appears that the idea of culture centers is based upon the functioning of the tribal group, rather than upon the history of any particular trait. If a true center of influence exists it must be creative, or at least formative, in which case many traits will emanate from it.

UNIFORMITY IN THE CULTURE AREA

At the outset it was noted that the culture area was a development of North American research. Some attempts have been made to define culture areas in South America and in Africa, but the intensive study of the several tribal cultures has not been carried far enough to make it certain that precisely similar areas exist in either, though the evidence as it stands points in that direction. Many critics of the culture area idea doubt that it applies to Old World cultures in the same way as to those in the New World. Yet, the answer to this question

lies in future research rather than in contemporary discussion. It is possible that the cultures of the New World are more recent in origin than those of the Old World, that in some marginal areas of America the tribal cultures observed at the time of discovery were essentially the original cultures. For instance, there is, so far, no good evidence that any culture other than a bison-hunting culture ever existed in the Plains country. If that is a true statement of the case, then the Plains culture area represents an uninterrupted regional development. If the first tribe to move out into the bison country adjusted its mode of life to exploit the bison, it is conceivable that such other tribes as followed it into this area profited by their experience. In this way one can satisfactorily visualize the development of the Plains type of culture as found in the eighteenth century. On the other hand, it is conceivable that a tribe well entrenched in a wholly different type of culture might have come into the midst of the bison-hunting tribes and have maintained itself simultaneously with them. Something like this is observable in southwestern United States, where the Spanish explorers found the so-called Pueblo Indians living in villages, or apartment houses, supporting themselves, in the main, by agriculture, and surrounded by less sedentary tribes. This is frequently pointed to as evidence against the fundamental character of the culture center idea and as especially contradictory to the idea that a culture area is homogeneous. The question involved may be stated thus: can two culture types occupy a region simultaneously? We have noted that different culture types may occupy the same region successively and there seems no *a priori* reason why two or more types might not exist simultaneously. We should expect, however, that tribes living in such proximity to each other would borrow traits from one another, regardless of differences in culture type. In fact, that is observable in southwestern United States, the more nomadic tribes like the Apache, Navajo, etc., having borrowed some material arts from the village tribes, especially a number of religious ideas and ceremonial symbols. This means that the more highly organized villages such as Hopi, Zuñi, Acoma, etc., were leaders in the region, and that while the difference between the surrounding tribes and the villages was unusually

great, the resemblance to a culture area is still clear. If all the tribes of this region had lived in Pueblo villages, no great objection would have been raised to regarding them as of one culture type. Nor is this a unique case, since other examples appear in Central America and in the Old World. The previous question can be answered then by the statement that, while two or more rather diverse culture types may occupy a region simultaneously, there is still a great deal of diffusion and consequently, the type of culture possessing the greatest solidarity and vigor tends to lead and thus become the center of influence.

SUMMARY

A study of the inter-relations among the tribes in a culture region reveals similarities that suggest a unity in culture development. Such a group of tribes and their habitat is spoken of as a culture area. One outstanding characteristic of a culture area is that the few tribes ranging around the center of the area appear to possess a form of culture which is the most typical, or which best represents the area type. The surrounding marginal tribes are less typical. The assumption is made that the central nucleus of tribes is a center of culture influence. The concept of a center of culture influence may prove more satisfactory than the older idea of a culture area, because it is difficult and in some respects profitless to draw exact boundaries to a culture area, the important matter being to determine the group of tribes forming the center from which specific culture influences radiate. Culture centers are not peculiar to primitive peoples but are functioning at present in all parts of the world. When culture areas are defined, however, it is observed that their boundaries closely conform to the distribution of topographical and other environmental features. The interpretation usually given is, that it is this environment which gives rise to the culture area. However, it is only the geographical form of the culture area that seems to result from these environmental characters. In other words, it is not so much the culture trait itself that is determined by the environment as the form of the distribution. The phenomenon of concentric zones, also, seems due to environmental causes.

CHAPTER XX

CULTURE PROCESSES

In the preceding chapter note was taken of a functional aspect of tribal life in that the tribal culture was conceived as living phenomena. Further, it is conceived that culture grows and spreads among tribes, or that processes of culture exist. Also it is conceived that culture may have a dynamic aspect. If, for example, we assume the existence of a culture center from which influences radiate, we assume processes or interactions among the tribes concerned. The term diffusion is now used to designate the process by which culture traits spread over a region or pass from one tribe to another. Borrowing is regarded as a term of dynamic significance, the conception being that the new trait is observed in a foreign culture and imitated. What happens when two widely different cultures meet for the first time is not well understood, in fact, is just beginning to be investigated. The culture center itself may be approached from this angle, or by regarding the interactions of the tribes composing it. But irrespective of these questions, the establishment of culture areas reveals an association of traits to form the culture type, the nature of which challenges investigation.

DIFFUSION

The tendency to borrow culture traits seems universal. In its broadest sense diffusion explains the whole spread of culture among mankind, but in the technical anthropological sense, what is meant is that one tribe tends to borrow from another. A biological character like blond hair might well spread in a population by inheritance, which would be a kind of diffusion, but not the specific kind to which the term is applied in culture. The process of culture diffusion may be imitative, a matter of learning, and either spontaneous or forced in from without.

Japan where, step by step, the traits of American and European culture have been taken over, presents a fair modern example of diffusion. In some cases the process was hastened by political action, as when the wearing of the English top-hat and evening clothes was enforced; when the calendar was adopted, etc. But, however brought about, the end process is what the anthropologists call diffusion. Wherever we look among primitive or civilized peoples, diffusion is observable and appears so inevitable that it may be viewed as a fundamental principle in culture. It must be taken into account when considering the origin of any culture type; also, it must be regarded as fundamental in regional developments and culture areas. Apparently diffusion may be conscious as well as unconscious, voluntary or forced. Conquest is one traditional method of forcing the diffusion of culture. Among the methods less dependent upon force are trade and education. Of all the modern agencies for diffusion the trader and the missionary are the most important. Yet, there are on every hand indications that such agencies are not essential, since mere proximity also results in diffusion.

The culture area, as usually conceived, is a diffusion area. Regional phenomena imply free diffusion within a more or less circumscribed area. Likewise a culture center is conceived as a center from which diffusion takes place. It is probable that diffusion is accelerated by a standardized economic adjustment to some one or two natural resources, because new traits arising among the tribal culture so standardized would be harmonious with the economic and material life already in vogue. Material traits are more easily observed by the would-be borrower than social or religious procedures; to the diffusion of mythology, rituals, etc., there are language impediments—but modes of food production, styles of clothing, forms of shelter, transportation appliances, etc., practised by a neighboring tribe can be observed, even from a safe distance.

ORIGIN OF CULTURE TRAITS

We have noted that a culture center is the place where traits of culture originate, whereas a culture area is the place of their

diffusion. How such traits originate need not puzzle one unduly because new traits are taking form under our own observation. The airplane is the symbol of transportation by air, already a large culture complex in modern civilization. Many persons now living remember the announcement of the first successful flight. They are also aware that the World War greatly accelerated the development of this culture complex, but it is safe to say that even had there been no war, we would still be now developing transportation by air. Nor is this a unique example; the radio and broadcasting is an equally significant instance of a trait complex the history of which is known. Whatever important differences there are between the history of such a culture trait as the snowshoe and that of the airplane, lie in the culture types among which they evolved. In modern culture, the superior means of travel and communication render the diffusion of new ideas and appliances rapid and effective; under such primitive conditions as must have prevailed when the snowshoe was invented, diffusion was probably much slower and less self-directed. Still the processes involved were the same; somebody conceived the idea in such a way as to lead to the invention and use of the new appliance. Once started, many improvements would be suggested, adding to the efficacy of the procedure, following which would be further adjustments within the content of the culture itself, by this means developing a culture complex of fair proportions.

To generalize, it appears that a trait grows out of an idea or an invention, as the case may be, but does not rise to the level of a culture trait until a standardized procedure is established in the group. A single individual may have started it, may have practised it for a long time, but until a number of his fellows adopt it and pass it on to the rising generation, it is not a trait of culture. Biologists tell us how nature provides thousands of seeds that one plant may reach maturity; in much the same way, the social anthropologist assumes that thousands of good ideas and suggestions in the minds of individual members of the primitive group were never included in the tribal practice and so failed to become traits of culture. In fact, the culture complex is the socialization of an idea or an appliance and could not be the work of a single individual. The radio,

just referred to, is a mechanical device, the perfection of which could not have been the work of any one person, but, on the other hand, its use is a social phenomenon, the specific procedure being possible only in a highly organized state of society such as we now live in. So the origin of a culture trait, particularly a culture complex, the form in which it is usually encountered, lies within a group. Other neighboring groups may borrow it in its initial form and in turn contribute something to its development, yet, the originating group which has the better start at it, or one of its immediate successors, will lead and thus be in the center of diffusion for the trait complex in question. We have already considered the question as to whether a trait ever developed in more than one place. There is no apparent reason why it could not, but because of incomplete data it is difficult to prove that two similar trait complexes in widely separated culture areas did grow up independently. Such a problem needs specific historical data as to when, where, and in what manner the first steps in the development of the trait were taken,—data rarely available. The matter of independent invention vs. single origin has thus become an academic question rather than a research problem. Yet, whether a tribe ever repeats the trait complex development of another is of little moment respecting culture processes, which in the main seem to be spontaneous in initial origin and to be subject to many hazards before rising to the level of group custom, or culture. In the last analysis, however, it is the behavior of man as a functioning individual that results in culture, though just what detailed form the culture of the group takes is determined by the circumstances of the time and place in which the specific culture traits arise.

SPONTANEOUS BORROWING

If, as seems to be the case, borrowing goes on under diverse conditions, the process may be considered as spontaneous. It is well to be reminded of this because in the oppression of primitive peoples by European and Asiatic colonization, it is usual to think of missionaries, educators, and political agents as forcing culture changes upon an unwilling people and in many cases

that is what seems to have taken place. For example, in colonial possessions, where natives normally went nude, regulations are adopted and enforced, requiring them to be clothed when coming into town or into the presence of Europeans. In course of time, the enforcement of such regulations would be expected to result in the universal adoption of the European custom. Here, however, no account is taken of what the native would do if left to his own choice. It will not do to assume offhand that he would remain nude. No one seems to have seriously observed the process of transition and reported upon it, so we are without satisfactory data. Nevertheless, there is some information. Certain enlightened officials and churchmen in Africa have taken the stand that native modes of dress, or undress, should be maintained, but find the natives themselves resisting. The constant example of the well clothed European, the suggestion of well being and elegance, lured the natives to do likewise. A correspondent writes from Africa, that his experience with the natives under his care is, "that if you tell a native to do a thing in as native a manner as possible, he will do it in his best possible imitation of a European way. If you try to persuade him to wear suitable indigenous clothing rather than follow the most unsuitable cast-offs of Europeans, or if you try to persuade him to develop his own educational system, he at once becomes suspicious and angry; to him all that is European represents civilization and if you want him to follow his own customs then you must try to keep civilization from him and to keep him a serf race! The greatest enemy of the whole experiment is the native himself."

The chief purpose in citing this illuminating bit of experience from the field is to emphasize the dearth of such data in the literature of social anthropology. Instead of merely seeking data as to what the savage was, at the time of European contact, it is quite as important that observations be made as to the present state of native culture. Anyway, these remarks of our correspondent should forcibly remind us that the spontaneous change of tribal culture, which went on continually before European colonials came upon the scene, should, under normal conditions, continue after that contact. There is reason

to suspect, then, another side to the story, that the missionaries and government officials are not wholly to blame, and that without them the presence of the trader and the exploiter would have induced changes in tribal life.

Failure to take this into account may lead to an equally grave mistake in attempting to reverse the usual policy. Social anthropologists have so insisted upon the disasters attending the sophistication of natives and the danger in breaking down aboriginal customs, that there is a movement on foot to restore or rehabilitate the passing cultures of native tribes, in the hope that this will serve as a foundation upon which to build an adjustment and ultimately bring about a safe and satisfactory transition to European custom. Again, we refer to our correspondent, who thinks there may be in this "a tendency to 'out-Herod Herod' when we discuss the future of the native. There is a tendency 'to go too much native,' to throw back too much, forgetting that the native is in many respects not as he was many years ago, that the process of evolution is going on all the time and that we must look for what is good at the time and not endeavor to build on something that the native has already left behind him. For example, if clan or intertribal divisions have really disappeared in a tribe, we should not endeavor to revive them because they may be regarded as more native than conditions as they exist now."

In conclusion, then, the change of tribal cultures due to borrowing appears first as due to spontaneous processes, or at least, governed by interests and motives in the borrowing group. Conquerors may, and apparently do, force natives to abandon some customs and adopt others, but the mere presence of the superior culture would also result in borrowing. Communities often maintain customs that are onerous and disgusting to the majority, but are upheld by a minority as impositions from supernatural sources and hence as sacred obligations. Under such circumstances the hand of the conqueror may be welcomed by the majority. Further, reformers and innovators are by no means peculiar to civilized peoples, but may be found among the most primitive. Tribal legends recount the glories of many a self-sacrificing hero laboring for

the advancement of his people. Borrowing and culture change from within may then be recognized as important factors in the growth of cultures.

While it does not follow that all borrowing of culture is spontaneous and undirected, it appears that such ready, spontaneous response on the part of the group is natural and universal. The procedure may at times be more or less rationalized as in the case of other like responses, but in the main it appears the most natural thing in human behavior for one group to imitate another.

LINKED TRAITS

We now approach a difficult problem, one for which no satisfactory solution has been offered. In brief, it relates to the existence or non-existence of functional and structural relations between the trait complexes comprising a culture. For example, could any one or more of them be dropped and the culture of the tribe continue otherwise unchanged? We might approach the question from the standpoint of our own culture; for instance, drop the whole complex of public education, or to be less drastic, abolish the public elementary school. Another hypothetical procedure might be to dispense with motor vehicles, confining ourselves to railways and horses. Let the reader ask himself in how far the present community in which he lives could carry on as it did, if even one of these complexes were dropped. It is not a question of better or worse, we are not concerned with that just now, but merely a question as to the ability of the community to maintain other culture complexes at the same level of functioning. As we said above, the answer to this is not clear. No such experiment seems to have been carried out, without upsetting the whole round of culture, except where the transition has been gradual. A procedure like that of Russia, to introduce a new system of labor, production, and capitalization, creates a lot of confusion in all phases of culture, but, is, after all, a gradual transition not very different from some of the changes that occur normally. The bison-hunting Indians of the United States met a crisis when the bison disappeared around 1880. The United States government came to the rescue by issuing beef cattle and rations every

few days. There was food enough, but the tribal culture fell into confusion, the shock of losing its original economic base broke down the whole structure. In opposition to such instances, others may be cited of a contrary nature, but it seems safe to say that a tribal culture is a highly complex structure in which the interruption of one function tends to throw the whole into confusion. Even trivial things seem to make trouble in our own culture: thus the spreading custom for men to go without hats is protested by the producers of hats as seriously threatening their business. Yet, just what is the nature of this linkage in traits is not clear.

In the discussion of the culture center and the culture area, we saw the phenomena as due to the diffusion of a whole galaxy of culture complexes, all of which seemed to emanate from a small group of tribes. Speculation suggests that a hunting tribe would develop beliefs concerning the species of game pursued, magical practices to control them, social values in terms of hunting and a religion in which animal symbolism was prominent. On the other hand, an agricultural people might magnify the weather and so symbolize their fears, hopes, and aspirations in the clouds, rain, thunder, etc. Yet, while this appears reasonable, it is not clear that such associations are inevitable, or that one diffuses more readily among hunting tribes than among others. The subject has not been studied enough even to formulate the problem. The linkage we can now visualize is the adjustment of the several trait complexes to each other so that group life may proceed in a reasonably harmonious manner. This adjustment is largely functional and may be grounded in the habits of the individual group members; the crisis arising when some parts of the round of life are rudely interrupted.

This problem of trait association can, however, be approached in an objective way. Many years ago Tylor suggested that the apparent diffusion of traits in groups be called *adhesion*, and by way of illustration, he investigated the relation of traits in the marriage complex by statistical methods. In its simplest form this problem is to see whether two traits are found together more often than chance would lead us to expect. Suppose we take the curious custom of the son-in-law avoiding his

mother-in-law and the custom of the groom going to live with the parents of the bride. If a hundred tribes were examined and both customs occurred in fifty of them and each of the remaining fifty tribes practised but one of the two customs, the relation would be a chance one. In this case no functional relation could be claimed for the two customs. As a matter of fact Tylor did find that this pair of customs occurred with a frequency in excess of chance and therefore concluded that they were functionally related. So far little use has been made of this method, but it should throw some light upon the fundamental problem of culture trait association within the tribal culture.

CULTURE CONFLICTS

The rapid expansion of European civilization and the consequent submergence of primitive life have given rise to the phenomenon called culture conflict. The spread of American population from the Atlantic westward was disastrous to the native Indian cultures. The reader should be familiar with the gross outline of events in border warfare and governmental control of the Indian. What usually happened was war between the colonists and one or more tribes at a time, and as the tribes were independent and frequently at war with each other, the colonists were easy victors. Once subdued, the tribe faced a culture crisis.

Such a tribe would be assigned a small tract of land upon which its members were supposed to support themselves and at the same time adopt the culture of the white man. Political independence ceased and police and judicial control passed into the hands of white officials. The first shock, however, was economic in character; if the traditional background of the tribal culture clustered around free hunting, such activities were greatly curtailed, necessitating greater dependence upon agriculture. Among the tribes of eastern United States some agriculture was practised by the women, it was not man's work; so when hunting was cut off and intertribal war stopped, the men saw no outlet for their aspirations and sank into idleness and dissipation. The coming of religious and secular teachers further challenged the moral and ethical sanction of

the old tribal culture and hastened the substitution of White standards. This transition period has proven so difficult for primitive peoples in all parts of the world that the tribal population tends to decline, as we have previously noted.

So far, we have spoken as if European civilization was peculiar in its destructive tendencies, but all powerful expanding cultures must have operated in the same fashion when they subdued smaller, weaker tribes; probably the greater the contrast in cultures so meeting, the greater was the shock. History tells us that the conquest of less developed cultures went on in many parts of the Old World and students of the aboriginal American civilizations in Middle America note on every hand evidences of similar procedures. History also records examples of barbarians seizing the government and riches of superior cultures and later absorbing the most important traits of the conquered culture. In all cases, however, there must have been a period of crisis, destruction and confusion, and, in general, it seems safe to say that the dominance of any strong group having a different culture, precipitates a culture crisis, which further emphasizes a previous statement concerning the delicate balance maintained between traits in a culture.

Yet primitive cultures may come in contact peacefully without conquest. If, for example, an Indian tribe residing in the open plains along the lower Missouri River should have migrated to the forests of the Ohio Valley, what would have happened when they observed how the forest tribes lived? Assuming that in the unoccupied hunting lands of the first there was room for another tribe, the situation confronting the newcomers could not have been a crisis in the sense in which we have used that term, but nevertheless new adjustments of a radical sort would be necessary. In making these adjustments, the newcomers would observe and copy the methods of their neighbors and in so doing would probably look upon their neighbors' mode of life as superior. Once this attitude were taken, the tendency might be to copy other traits, especially such as seemed most important in the surrounding cultures. The tribe, once in the position of a borrower, might be expected to so continue for a time. Such attitudes appear favorable to diffusion and also to the enhancement of culture centers and

regional developments in culture. On the other hand, two strong and rival tribes, in touch with each other, might be expected to take note of culture details and copy such new traits as developed. So far little attention has been paid to tribal rivalry as an aid to diffusion; rival tribes, like rival nations, study each other and covet what seems superior. This acquisition of the traits of rivals need not be highly rationalized, or carried on in a formal way; it can be largely spontaneous.

PROTECTIVE PROCESSES

We have emphasized the spontaneous aspect of culture borrowing and looked upon diffusion as the order of the day, but, on the other hand, observed that there is such a thing as culture conflict. In other words, the group does conserve or protect its culture. There is perhaps no social institution not subject to disintegrating factors. Some of these, like that of the family, have apparently held out from the first, though bearing the marks of the conflict. Sociologists speak of the conservation of culture as conservatism, resistance to change, tradition, etc., and reformers on every hand try to stigmatize these features of society, recognizing that here is where the obstacles to their efforts lie. That there is virtue in these stabilizing factors in culture is clear, when we observe what happens to primitive cultures when their resistance is broken down by contact with European cultures. The safety and the survival of the group lies in the relative stabilization of its culture, or at least in its proper adjustment to existing conditions. Of course, the defense reactions lying in the individuals are apparently deep set in the psychological constitution, and are sometimes spoken of as reactions to change. Moreover, the reaction is, for the most part, specifically against departure from standardized social procedure and, as we have seen, such standardization is what makes group life possible. It is not strange, therefore, that human behavior provides for the maintenance of culture, since in this lies the road to survival.

On the other hand, the processes of culture as a whole operate to maintain a balance and so allow for gradual change. Diffusion implies that changes come from without and such

seems to be the case; or to put the matter otherwise, groups react to one another, somewhat after the manner of individuals. This is the phenomenon that gives us culture areas, but not all change comes from without. The Pawnee Indians, for example, tell how human sacrifice was abolished by a young man who organized and led the opposition to what was regarded as a disagreeable business. It may well be that the absence of such sacrifice among surrounding tribes was an incentive, but not necessarily so. In all forms of society the younger generation is a modifying factor, especially in an expanding group. They are in process of making their adjustments to conditions as they find them and so are not in full sympathy with the ways of the older members of the group. All this is familiar enough, but is one of the internal factors making for change in culture. It is, however, the resistance of the elders that moderates the drive of the younger members of the group, and upon the degree to which these forces are equalized hangs the fate of the culture concerned.

Another process making for change is the tendency to recognize achievement in enriching culture. Among most tribes the man who introduces a new ceremony acquires prestige because he has brought in a new trait. Yet this ceremony must closely conform to the pattern already in vogue, otherwise it may not be tolerated. If, however, it does conform it may receive an immediate welcome. Similarly, there is little resistance to the entry of a new and superior tool, or device, as a substitute for one in daily use. Such an innovation does not in any way threaten the existing social adjustment. Ultimately it may, like the acquisition of the horse and the gun by the American Indian, greatly change the culture of the group, but that is neither foreseen nor realized, so no resistance is offered. The reaction is against obvious change of procedure, and the substitution of new values, or direct attacks upon standardized procedure. Speech is the most highly standardized custom in culture; it is not difficult to see why it is so, because its functioning depends upon it. In much the same way all social procedure must be more or less standardized if the group is to function.

Little attention has so far been paid to this aspect of group

activity, but it is a field inviting pioneering research. It seems probable that a too rapidly changing culture is just as disturbing to group life as gluttony to physiological functioning.

CONTEMPORARY CULTURE

The hope of social anthropology is that through it the individual may the better understand his own culture. The advantage in beginning with the cultures of non-European peoples lies in that one can see them from afar and concentrate attention upon selected phases of the social life observed. On the whole, however, while anthropology seems most intent on finding group differences, in the end these are classified and an effort made to discover the common characteristics of human groups in general.

What we have seen is that while groups do differ in their specific customs, they show a tendency to do the same kinds of things. Marriage is a good example of this, since all groups recognize it, but go about it in different ways. If, then, we fix attention upon the basic things in culture we see similarities rather than differences. Many of the concepts dealt with in the preceding pages will be found applicable to our own contemporary culture. On the other hand, the methods pursued in the study of non-European peoples are not necessarily applicable to contemporary problems. In the case of language, for instance, one can deal differently with the development of many Old World languages than with Australian native speech. In case of the former, much is known of the history of the several languages and due to the art of writing examples of the languages at different time periods are available. For languages without histories or written materials the problems are different and a somewhat different method must be pursued. Nevertheless, it has proven fruitful to apply the methods used in the study of Old World languages with histories, to the non-historical languages of primitive peoples, and the reverse. With respect to culture traits in contemporary culture we can usually fall back upon historical data to reveal the place and time of origin as well as the successive changes through which any given culture traits have passed. In such cases we need not use the

roundabout method of archæology or geography but can approach the problem directly. It is of advantage, however, to find that the processes of culture so far formulated may be seen in operation in our own community and in the group of nations constituting the civilized world.

On the other hand, it would have been difficult to conceive of culture from the study of contemporary life alone. The tendency in such studies has been to emphasize the acts of the individual rather than the group, which is inevitable unless one acquires the perspective that comes with the study of the non-historical cultures. So the net outcome of social anthropology has been to throw into high relief the universal characteristics of culture and to awaken us to the realization of our own culture.

CONCLUSION

The important concept in contemporary anthropology is that of culture, both in its static and its dynamic aspects. We have seen, from the outset, how social anthropology took the community as its problem and concentrated first upon one approach and then upon another, retaining in each instance the most objective methods and results. The most impressive of these approaches we have designated as the great leads in anthropological research: man's zoological relationships and the biometric method, the conception of linguistic stocks, time sequence as revealed by stratigraphy, the conception of animism, relationship systems, totems, magic, geographical distribution, and the culture area. In this volume, however, we have specialized upon the culture of the living community, as subject to contemporary observation and our review leaves the impression that, in its objective form, culture is a result of community life, but when viewed as a living process is seen as a function of community life. We have been impressed by the evidence of perpetual change in the content of cultures, indicating that cultures, as expressed in objective terms, are adjustments to changing conditions.

One objective in anthropological research has been historical or sequential perspective. This has been sought by the integration of biological, archæological, geographical, and sociological

methods, supplemented by special inquiries to fill gaps in the historical outline of man's career. The mere accumulation of information during the next century may be expected to enrich our knowledge and thereby sharpen our perspective. This will be worth the effort, but, on the other hand, the way has been opened to the study of our own culture as an integral part of human life. We have given no consideration to the psychological aspects of community functions, because such lines of inquiry would lead us directly into the methods developed by psychology. All we can do here is to note that with the anthropological conceptions of community life as points of departure, it should not be difficult to formulate the important contemporary problems in social psychology. Finally, since the most satisfactory progress in research seems to result from the experimental approach to all problems, there is still hope that in the variety of contemporary situations, in the adjustments of communities to external conditions, may be found opportunity for the application of methods approximating the experimental ideal. In any case, it remains to give close attention to contemporary community functions.

FOR FURTHER STUDY AND READING

The preceding pages are submitted as a brief outline of social anthropology; a fuller view of the subject will depend upon the use of additional data and the examination of the most important publications. The following notes are suggestions as to how the student may readily approach the topics treated under the several chapter heads to formulate his own view of the phenomena under consideration.

CHAPTER I

It is suggested that after reading this chapter, the student examine one or more of the books listed below, note the range of topics discussed and read the pages presenting the author's point of view and method of approaching the problems treated. What are the main problems pursued by the anthropologists? What different types of data are used? Look up biographical information concerning Francis Galton, William von Humboldt, Lewis H. Morgan, E. B. Tylor, and F. Ratzel.

Boas, Franz. *Anthropology and Modern Life*. New York, 1928.
Goldenweiser, Alexander A. *Early Civilization. An Introduction to Anthropology*. New York, 1922.

Haddon, Alfred C. *History of Anthropology*. London, 1910.

Kroeber, A. L. *Anthropology*. New York, 1923.

Marett, R. R. *Anthropology*.

Osborn, Henry Fairfield. *Men of the Old Stone Age. Their Environment and Art*. New York, 1915.

Sapir, Edward. *Language. An Introduction to the Study of Speech*. New York, 1921.

Tylor, John M. *The New Stone Age in Northern Europe*. New York, 1921.

Tylor, E. B. *Anthropology. An Introduction to the Study of Man and Civilization*. New York, 1904.

CHAPTER II

The emphasis in social anthropology is upon data from living peoples. For background, read two or more of the books listed on page 17. Then, to clarify your impressions of primitive life, imagine yourself an Eskimo landing in an American town for the first time and outline a report to your Eskimo friends at home respecting the mode of life observed in this town. Prepare a brief

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description of community life as presented in one of the books listed on page 9. How distinguish between a community and a tribe? In how far is the primitive community comparable to a civilized one?

CHAPTER III

Population problems are of sufficient importance to warrant further study. Selected readings from the following are recommended:

Carr-Saunders, A. M. *The Population Problem, A Study in Human Evolution*. Oxford, 1922.

Roberts, S. H. *Population Problems of the Pacific*. London, 1927.

What is meant by the anthropometric type for the group? What are the measurements most often used in defining such types? Consult one or more of the following:

Conklin, Edwin Grant. *Heredity and Environment in the Development of Men*. Princeton, 1923.

Hrdlička, A. *Anthropometry*. Philadelphia, 1920.

Sullivan, L. R. *Essentials of Anthropometry* (American Museum of Natural History, revised by H. L. Shapiro, New York, 1928).

Walter, Herbert Eugene. *Genetics. An Introduction to the Study of Heredity*. New York, 1922.

Wilder, Harris H. *A Laboratory Manual of Anthropometry*. Philadelphia, 1920.

How have peoples been classified? Name the important race groups and sketch their respective geographical distributions. Consult Haddon, A. C. *The Races of Man and Their Distribution*. New York, 1925, or any other general work on the subject.

CHAPTER IV

Choose one of the peoples studied in connection with Chapter III and compile lists of their principal foods and the raw materials used in their handiwork. Can you cite important untouched resources in their habitat? Characterize their economic life by seasons.

Name the chief world foods; were the chief cultivated plants developed among civilized or primitive folk? For a background to primitive economics read:

Coville, Frederick Vernon. *Woka, a Primitive Food of the Klamath Indians* (Report, United States National Museum, for 1902, pp. 725-739, Washington, 1904).

Jenks, Albert Ernest. *The Wild Rice Gatherers of the Upper Lakes* (Nineteenth Annual Report, Bureau of American Ethnology, pp. 1013-1137, Washington, 1900).

For the early background to European economic life, read :

Peake, Harold, and Fleure, Herbert John. *The Corridors of Time*. Oxford, 1927.

CHAPTER V

For examples of form and structure in aboriginal American languages examine two or more tribal studies as presented in the *Handbook of American Indian Languages*. For additional references for selected readings, see :

Boas, Franz. *Handbook of American Indian Languages* (Bulletin 40, Bureau of American Ethnology, Parts 1 and 2, Washington, 1911, 1922).

Haven, Samuel F. *Archæology of the United States, or, Sketches Historical and Bibliographical, of the Progress of Information and Opinion respecting Vestiges of Antiquity in the United States* (Smithsonian Contributions to Knowledge, Vol. 8, pp. 1-168, Washington, 1856).

Kroeber, A. L. *Anthropology*. New York, 1923.

Sapir, Edward. *Language. An Introduction to the Study of Speech*. New York, 1921.

Sayce, A. H. *Introduction to the Science of Language*. 2 vols. London, 1880.

CHAPTER VI

What is the distinction between archæology and other fields of anthropology? How are differences in time discovered? Of what significance to social anthropology are time sequences? As examples of method and approach in archæological research consult the following books :

Crawford, O. G. S. *Man and His Past*. London, 1921.

Kidder, Alfred Vincent. *An Introduction to the Study of South-western Archæology, with a Preliminary Account of the Excavations at Pecos*. New Haven, 1924.

Lubbock, Sir John. *Pre-Historic Times, as Illustrated by Ancient Remains, and the Manners and Customs of Modern Savages*. New York, 1872.

MacCurdy, George Grant. *Human Origins. A Manual of Pre-history*. 2 vols. New York and London, 1924.

- Obermaier, Hugo. *Fossil Man in Spain*. New Haven, 1924.
 Osborn, Henry Fairfield. *Men of the Old Stone Age. Their Environment, Life, and Art*. New York, 1918.
 Sollas, W. J. *Ancient Hunters, and Their Modern Representatives*. London, 1911.
 Tyler, John M. *The New Stone Age in Northern Europe*. New York, 1921.

If a museum is accessible, examine the archæological collections; select a collection from one geographical area and prepare a statement of the probable mode of life associated with the objects exhibited.

CHAPTER VII

For perspective in the history of this subject examine the following:

- Bachofen, J. J. *Das Mutterrecht*. Stuttgart, 1861.
 Maine, Sir Henry. *Ancient Law, Its Connection with the Early History of Society, and Its Relation to Modern Ideas*. New York, 1871.
 Morgan, Lewis H. *Ancient Society, or Researches in the Lines of Human Progress from Savagery through Barbarism to Civilization*. New York, 1878.

What are the characteristics of a tribe? What is the relation of tribes and communities? What is meant by the integration of communities and tribes? Illustrate in American life. How were nations like England, France, Germany, etc., formed? For fuller accounts of primitive community and tribal organization read parts of:

- Goldenweiser, A. A. *Early Civilization. An Introduction to Anthropology*. New York, 1922.
 Hartland, Edwin Sidney. *Primitive Society. The Beginnings of the Family and the Reckoning of Descent*. London, 1921.
 Lowie, Robert H. *Primitive Society*. New York, 1920.
 Wheeler, G. C. *The Tribe and Intertribal Relations in Australia*. London, 1910.

CHAPTER VIII

What phenomena automatically tend to divide the community? Compare the division by sex with other grouping, as labor, age, property, sib, etc. How do such division tendencies operate in your own community? Read the appropriate sections in some of the following:

- Brown, A. R. "Three Tribes of Western Australia" (*Journal of the Royal Anthropological Institute of Great Britain and Ireland*, Vol. 43, pp. 143-194, London, 1913).
- Buxton, L. H. Dudley. *Primitive Labour*. London, 1924.
- Goddard, Pliny Earle. *Indians of the Northwest Coast* (Handbook Series No. 10, American Museum of Natural History, New York, 1924).
- Lowie, Robert H. *Primitive Society*. New York, 1920.
- Malinowski, B. *The Family Among the Australian Aborigines*. London, 1913.
- Mason, Otis T. *Woman's Share in Primitive Culture*. New York, 1907.
- Morgan, Lewis H. *Ancient Society or Researches in the Lines of Human Progress from Savagery through Barbarism to Civilization*. New York, 1878.
- Rivers, W. H. R. *Social Organization*. New York, 1924.
- Westermarck, Edward. *A Short History of Human Marriage*. London, 1926.

CHAPTER IX

Work out in a table or diagram the relationship system current in your own society, taking yourself as the focal point. Is this system descriptive or classificatory? What functions does this system have? Distinguish between the views of Morgan, Rivers, and Kroeber. By what method did Morgan, and later Rivers, attempt to reconstruct society? The following are suggested for supplementary reading:

- Dixon, Roland B. "Some Aspects of the Scientific Work of Lewis Henry Morgan" (*Researches and Transactions of the New York State Archæological Association*, Vol. 1, No. 3, Rochester, 1919).
- Gifford, E. W. "California Kinship Terminologies" (*University of California Publications in American Archæology and Ethnology*, Vol. 18, pp. 1-285, Berkeley, 1922).
- Kroeber, A. L. "Classificatory Systems of Relationship" (*Journal of the Royal Anthropological Institute of Great Britain and Ireland*, Vol. 39, pp. 77-84, London, 1909).
- Lowie, Robert H. *Culture and Ethnology*. New York, 1917.
- Malinowski, Bronislaw. *The Father in Primitive Psychology*. New York, 1927.
- Rivers, W. H. R. *Kinship and Social Organisation*. London, 1914.
- The History of Melanesian Society*. 2 vols. Cambridge, 1914.

CHAPTER X

The information on marriage offered by anthropology gives the range of variation in the custom. What are the chief forms of marriage? Can you think of other possible forms? What is the function of the marriage ceremony? Review the origin theories for marriage. Consult:

- Crawley, Ernest. *The Mystic Rose. A Study of Primitive Marriage and of Primitive Thought in Its Bearing on Marriage*. Second Edition. 2 vols. London, 1927.
 Lowie, Robert H. *Primitive Society*. New York, 1920.
 Van Gennep, Arnold. *Les Rites de Passage*. Paris, 1909.
 Tozzer, Alfred Marston. *Social Origins and Social Continuities*. New York, 1925.
 Westermarck, Edward. *A Short History of Marriage*. London, 1926.

CHAPTER XI

For an acquaintance with totemism, consult:

- Frazer, J. G. *Totemism and Exogamy*. 4 vols. London, 1910.

Is totemism a universal phenomenon? Characterize some of the variations in totemism? What are the main points in Frazer's conception of totemism? For critical discussions of totemism, see:

- Goldenweiser, A. A. *Early Civilization. An Introduction to Anthropology*. New York, 1922.
 "Totemism, an Analytical Study" (*Journal of American Folk-Lore*, Vol. 23, pp. 1-115, 1910).
 Lang, Andrew. *The Secret of the Totem*. London, 1905.

CHAPTER XII

What was Tylor's conception of animism? What distinctions are involved in the concept of animatism as defined by Marett? Explain the concept of survival. Enumerate examples of such survivals as observed in contemporary life. Selected readings from the following are recommended:

- Boas, Franz. *The Mind of Primitive Man*. New York, 1911.
 Read, Carveth. *Man and His Superstitions*. Second Edition. Cambridge, 1925.
 Tylor, Edward B. *Primitive Culture. Researches into the Development of Mythology, Philosophy, Religion, Language, Art, and Custom*. 2 vols. Sixth Edition. London, 1920.

CHAPTER XIII

What is meant by magic? Give examples of magic in contemporary life. What is the rôle of magic in the attitude of primitive man toward disease and death? Define the concept of "taboo." Comment on the place of magic in religion. The following references are recommended:

- Frazer, J. G. *The Golden Bough. A Study in Magic and Religion.* Abridged Edition. London, 1924.
 Hartland, E. S. *Ritual and Belief. Studies in the History of Religion.* London, 1914.
 Lang, Andrew. *Magic and Religion.* London, 1901.
 Lowie, Robert H. *Primitive Religion.* New York, 1924.
 Maddox, John Lee. *The Medicine Man. A Sociological Study of the Character and Evolution of Shamanism.* New York, 1923.
 Marett, R. R. *The Threshold of Religion.* Second Edition. London, 1914.
 Rivers, W. H. R. *Medicine, Magic, and Religion.* London, 1924.

CHAPTER XIV

Read a collection of tribal mythology selected from the references given in the text. What relation do these myths bear to the religion of the tribe? How have mythologies contributed to our knowledge of tribal relationships? What is meant by a culture hero? Comment on the place of animal characters in primitive mythologies. What place does mythology hold in contemporary life? In the literature for our children? In art? Consult the following:

- Bartlett, F. C. *Psychology and Primitive Culture.* Cambridge, 1923.
 Gomme, G. L. *Mythology as a Historical Science.* London, 1908.
 Lang, Andrew. *Myth, Ritual and Religion.* 2 vols. New York, 1887.
The Mythology of All Races. 13 vols. Boston, 1916-1925.

CHAPTER XV

What is meant by a ritual? Select a published account of an American Indian tribe and characterize its ceremonies. What relation do these bear to the religion of the tribe? What is meant by a ceremonial pattern? Formulate a statement as to the function of tribal ceremonies. Comment on the place of song and verse in rituals. The following references are suggested:

378 FURTHER STUDY AND READING

- Fletcher, Alice C. *The Hako: A Pawnee Ceremony* (Twenty-second Annual Report, Bureau of American Ethnology, Washington, 1904).
- Lowie, Robert H. *Primitive Religion*. New York, 1924.
- McClintock, Walter. *The Old North Trail or Life, Legends and Religion of the Blackfeet Indians*. London, 1910.
- Spencer, Sir Baldwin and the late Gillen, F. J. *The Arunta. A Study of a Stone Age People*. 2 vols. London, 1927.
- Radin, Paul. *Primitive Man as a Philosopher*. New York and London, 1927.

CHAPTER XVI

Outline the history of stone tools. Of what significance in this connection is the stratigraphic method of archæology? Comment upon the continuity of form and process in weaving, fire-making, pottery, stonework, etc. What place has art in a tribal culture? If a museum is accessible, select the exhibit for a tribe, or a small area, and characterize the art and technology observable.

- Boas, Franz. *Primitive Art*. Instituttet for Sammenlignende Kulturforskning. Serie B, Skrifter III. Oslo, 1927.
- Gifford, E. W. "Pottery-Making in the Southwest" (*University of California Publications in American Archæology and Ethnology*, Vol. 23, No. 8, Berkeley, 1928).
- Guthe, C. E. *Pueblo Pottery Making. A Study at the Village of San Ildefonso*. New Haven, 1925.
- Holmes, William H. *Handbook of Aboriginal American Antiquities*. Part I, Introductory, *The Lithic Industries* (Bulletin 60, Bureau of American Ethnology, Washington, 1919).
- Kissell, Mary Lois. *Yarn and Cloth Making. An Economic Study*. New York, 1918.
- Basketry of the Papago and Pima* (Anthropological Papers, American Museum of Natural History, Vol. 17, Part 4, 1916).
- Mason, Otis Tufton. *Aboriginal American Basketry: Studies in a Textile Art without Machinery* (United States National Museum Report for 1902, Washington, 1904).
- Tylor, E. B. *Researches into the Early History of Mankind and the Development of Civilization*. New York.

CHAPTER XVII

What is the significance of the term anthropogeography? Sketch the history of geography as a science. What is meant by the regional conception of culture? In how far is this conception equally applicable to primitive and to civilized man?

- Ratzel, Friedrich. *The History of Mankind*. Translated from the Second German Edition by A. J. Butler. 3 vols. London, 1896.
- Anthropo-geographie oder Grundzüge der anwendung der Erdkunde auf die Geschichte*. Stuttgart, 1882.
- Anthropogeographie. Zweiter Teil: Die Geographische Verbreitung des Menschen*. Stuttgart, 1912.
- Semple, Ellen Churchill. *Influences of Geographic Environment on the Basis of Ratzel's System of Anthropo-Geography*. New York, 1911.
- Vidal de La Blache, P. *Principles of Human Geography*. Edited by Emmanuel de Martonne. Translated from the French by Millicent Todd Bingham. New York, 1926.

CHAPTER XVIII

Is it justifiable to characterize the geographical approach in modern anthropology as an historical procedure? What emphasis is to be placed upon place of origin and time? Estimate the value of the hypothesis of a relation between age and geographical distribution. Formulate the environment problem in primitive cultures. Consult:

- Bartlett, F. C. *Psychology and Primitive Culture*. Cambridge, 1923.
- Boas, Franz. *The Mind of Primitive Man*. New York, 1911.
- Dixon, Roland B. *The Building of Cultures*. New York, 1928.
- Ellwood, Charles A. *Cultural Evolution. A Study of Social Origins and Development*. New York, 1927.
- House, Floyd N. *The Range of Social Theory. A Survey of the Development, Literature, Tendencies and Fundamental Problems of the Social Sciences*. New York, 1929.
- Kroeber, A. L. *Handbook of the Indians of California* (Bulletin 78, Bureau of American Ethnology, Washington, 1925). "Native Culture of the Southwest" (*University of California Publications in American Archaeology and Ethnology*, Vol. 23, No. 9, pp. 375-398, 1928).
- Lowie, Robert H. *Culture and Ethnology*. New York, 1917.
- Odum, Howard W. and Jocher, Katharine. *An Introduction to Social Research*. New York, 1929.
- Rivers, W. H. R. *The History of Melanesian Society*. 2 vols. Cambridge, 1914.
- Wissler, Clark. *The American Indian. An Introduction to the Anthropology of the New World*. Second Edition. New York, 1922.
- Man and Culture*. New York, 1923.

CHAPTER XIX

Formulate a statement of the culture area concept; first in geographical terms; secondly, in terms of culture similarities; thirdly, in terms of culture centers. Two primitive culture areas intensely studied are California and the Plains in the United States. Consult:

- Kroeber, A. L. *Handbook of the Indians of California* (Bulletin 78, Bureau of American Ethnology, Washington, 1925).
 Wissler, Clark. *North American Indians of the Plains* (Handbook Series, No. 1, American Museum of Natural History. Third Edition. New York, 1927).

CHAPTER XX

Define the concept of diffusion. What is the opposing concept? In how far is diffusion spontaneous? How does a tribal culture change? What is the rôle of individual leadership? Of tribal leadership? Characterize what happens in culture when two contrasting cultures meet, as primitive and European. What are the similarities and differences respective to primitive and European cultures?

- Bartlett, F. C. *Psychology and Primitive Culture*. Cambridge, 1923.
 Dixon, Roland B. *The Building of Cultures*. New York, 1928.
 Ogburn, William Fielding. *Social Change with Respect to Culture and Original Nature*. New York, 1922.
 Wissler, Clark. *Man and Culture*. New York, 1923.

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